

# **Identification and Conflict in Virtual Teams: A Social Identity Approach**

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## **ABSTRACT**

Globalisation and the use of Information and Communication Technologies (ICTs) have extended the capabilities of organisations to alter their team based structures from traditional to virtual settings. The use of virtual teams has increased rapidly worldwide because such teams allow geographically dispersed people with common goals to perform interdependent tasks via the use of ICTs. Virtual teams may experience high levels of conflict because they work across organisational, geographical, cultural and time boundaries.

The identification of individual members with their team has been linked to lower levels of conflict and an increase in behaviours that are congruent with virtual team identity. Past research has shown that the conflict-reducing effect which results from team identification is important in virtual settings. Yet there is relatively little empirical research that investigates conflict within virtual teams in terms of identification. The current research thus aims to examine how the impacts of the development of identity influence the emergence and resolution of conflict within virtual teams. It examines first the process and determinants of identification in the teams and secondly, the effect of self-enhancement strategies on virtual team members' inter-group and conflict handling behaviour.

A combination of a critical view on Social Identity Theory (SIT) and a qualitative case study methodology was utilised in comprehending the cognitive processes of identification, its sources of motivation, and employees' inter-group relations within virtual teams. An empirical study of seven virtual teams drawn from four companies was undertaken. This study extends SIT into virtual settings. It suggests that examining identification processes in virtual teams provides an understanding of the inter-group relations in such teams. The findings reveal that employees' intrinsic needs drive their identification with a particular virtual team and the fulfilment of such needs is influenced by the team's contextual and situational factors. Additionally, the identification processes have an impact on the team members' inter-group and conflict handling behaviour. This study contributes to SIT by drawing attention to directions for growth of contextual and longitudinal dimensions in research which examines the identification process and conflict of virtual teams.

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## LIST OF ABBREVIATIONS

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ICTs	Information and Communication Technologies
SCT	Self-Categorisation Theory
SIT	Social Identity Theory
SM	Scientific Management
RCT	Realistic Conflict Theory

# CHAPTER ONE: INTRODUCTION

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## 1.1 Aims and Objectives

The recognition and use of teams in the workplace has expanded considerably in response to the competitive, complex, and challenging business world (Cohen and Bailey, 1997, p.239). As Katzenbach and Smith (1993, p.5) note, 'the performance challenges that face large companies in every industry [...] demand the kind of responsiveness, speed, on-line customisation, and quality that is beyond the reach of individual performance'. As a result, teamwork has become an important business tool as it not only helps the organisation to solve problems more quickly but also helps them to improve quality and increase productivity (Scholtes, 1988, pp.2-7).

In Mathieu et al.'s (2008) review of the literature on teamwork, they note that most past research on teamwork has looked at team effectiveness and its contribution to organisational success. More specifically, past research has concentrated on the connection between a team's inputs, processes, and outcomes. In an attempt to study the outcome and performance of a team, the emphasis has been primarily on questions of 'who is a member of a team', 'how they [team members] work together' and 'what they [team members] do to perform their work' (Mathieu et al., 2008, p.415). With questions such as these, the research focus is clearly centred around the social context of the team and the impact it has on team members' behaviour. Such information can help organisations to recognise how team members can be encouraged to identify with their team and work with their colleagues.

A team is more than a mix of the 'skills and effort of a group of people' - It also includes emotional attachments between team members, without which it would be difficult to facilitate effective teamwork (Lembke and Wilson, 1998, p.928). The cognitive, motivational and affective dimensions of a team have an effect on team outcomes (Cohen and Bailey, 1997, p.282).

As teamwork becomes more common in the organisations, teams have also become more diverse in terms of their aims, objectives, structures and functions (Proehl, 1997, p.137). In response to the challenge of globalisation and the voracious demand of customer requirements, organisations are supplementing their conventional teams with virtual ones (Herzog, 2001). In virtual teams, employees, who are distributed across geographical distance, time and organisational boundaries, are able to work together using information and communication technologies (ICTs) (DeSanctis and Poole, 1997; Lipnack and Stamps, 1997).

One of the obstacles that organisations may face in virtual teams is the escalation of instances of misunderstanding and conflict among their members owing to lack of face-to-face interaction and geographical dispersion (Hertel et al., 2005). As Hinds and Mortensen (2005) note, conflict is inevitable in distributed teams and is also difficult to deal with (see also Hinds and Bailey, 2003; Mannix, et al., 2002). Studies of virtual teams (e.g. Armstrong and Cole, 2002; Cramton, 2001) have reported a significant amount of conflict between team members, as these virtual employees often have difficulty reaching consensus with one another because of their diverse viewpoints, a lack of information and the constant presence of interpersonal tension that is the result of cultural diversity and geographic dispersion (Hind and Mortensen, 2005, p.290).

Conflict can lead to ineffective teamwork and result in negative outcome in virtual teams (Hinds and Mortensen, 2005). Since scholars (Paul et al., 2004; Saunders, 2000) have recently begun to stress the importance of conflict management in achieving effective virtual team outcomes, conflict management is one area of task processes in virtual teams that need further research (Powell et al., 2004) .

Past research (e.g. Hinds and Mortensen, 2005; Jehn et al., 1999) has found that a strong shared identity among the virtual team members can reduce conflict in virtual teams. Shared identity in a virtual team represents ‘team members’ sense of oneness with the team and is made up of a cognitive component of joint effort toward a common goal’ (Webster and Wong, 2008, p. 43). When a shared identity is prominent within a team, there tends to be a higher degree of commitment, trust, and cohesion among team members, which in turn leads employees to be more dedicated to the entire team (Brewer and Miller, 1996). In

virtual teams, developing a shared identity among the members is therefore important in promoting a sense of togetherness (Raghuram, 1996) and reducing conflict (Hinds and Mortensen, 2005).

The current study aims to examine whether high levels of shared identity in virtual teams lead to lower levels of interpersonal conflict within such teams. The aim is to seek insights into the role of social identity on conflict within virtual teams, by investigating the process of social identification and its ongoing impact on inter-group and conflict handling behaviour among the team members. In doing so, the social identity approach is used as the lens through which the psychological processes and the motivational impact of social identification within virtual teams can be analysed. Such an approach is useful for assessing these issues because it is interested in ‘how people unify, as in groups, and think and behave in relative unison’ (Lembke and Wilson, 1998, p.929).

Indeed, the concept of ‘social identity’ is applicable to studies of both the individual working alone and employees working in teams – be they physical or virtual. As an employee’s social identity is derived by others – other individuals, other social group(s) and other team(s), his/her attitudes, values, and norms may be shaped by his/her interactions with the groups and teams to which he/she belongs. Social identity influences the way an individual thinks and behaves at work (Ashforth and Mael, 1989).

The process whereby an individual attaches to and identifies with a team involves cognitive, emotional and behavioural alignment with other members of that team (Turner, 1987). Therefore, an analysis of the process of social identification provides an insight into employees’ collective attitudes and behaviours (Postmes et al., 2005, p.6). This has resulted in a growing interest in studying social identity within an organisation, especially when it comes to looking at how employees create a positive sense of identity, how they develop feelings of inclusiveness, and how they strengthen their attachments to the larger organisation (Benkhoff, 1997; Hogg and Terry, 2000a; Reade, 2001). Consequently, organisational research has developed through the use of ‘social identity’ as a useful concept to explain organisational commitment, motivation, satisfaction and employee interaction (Ashforth and Mael, 1996).

There has been a growing interest amongst social psychologists (Abrams and Hogg, 1998; Ashforth and Mael, 1989; Haslam, 2001, 2004; Tajfel, 1978; Tajfel and Turner, 1979) in studying group processes and inter-group relations (Hogg and Terry, 2000a). Indeed, the recent interest in the psychology of groups has emerged from studies of interpersonal relationships within groups to issues of identity within groups (Hogg and Terry, 2000a, p.121). Thus, it has been felt to be desirable and somewhat logical to approach the current research into virtual teams from the perspective of social psychology. The social identity perspective in social psychology has its conceptual origins in Henri Tajfel's Social Identity Theory (SIT) (Tajfel and Turner, 1979). The core concepts of SIT are social identity, categorisation and comparison. These core concepts have been taken into account when considering the process of social identification and its consequences on conflict in this work.

The current chapter provides an outline of the theoretical and empirical underpinnings of this study. It is organised as follows: first, it presents the development and evolution of small groups and teams in the workplace. This discussion is briefly presented so as to illustrate the ways in which teamwork has been at the heart of recent efforts to improve productivity, job quality, and the working conditions of employees. Second, a brief review of the different studies of teamwork and organisational behaviour is presented. These include perspectives derived from sociology, psychology and social psychology. Such perspectives are presented in order to explain and justify the approach of the current study. Third, the concept of 'social identity' and SIT are briefly discussed. This discussion includes a consideration of 'social categorisation', which was developed as an extension of SIT to detail the social cognitive processes that generate social identity effects (Hogg and Terry, 2000a, p.123). It is vital to highlight at this stage that the SIT's focus on groups and theories of the emergence of the employee's social self provides key insights into collective behaviour and employees' interrelations in any virtual team. Finally, the philosophical foundation, methodology and methods upon which the current study is based are briefly presented and are followed by an outline of the structure of the thesis. The research in this study involved empirical work which was carried out in four companies from different industrial sectors, each of which operated virtual teams. Seven of these teams were examined, as detailed in this work.

## **1.2 Brief History of Teamworking**

In many cases, teams are replacing or supplementing individuals as the basic method of operation of work organisations. Teamwork has been adopted widely in manufacturing industries (Kuipers, 2005) as well as in other areas of business such as clerical work (Kinnie et al., 1998). As Cohen and Bailey (1997) have described, work teams are found both in manufacturing and service settings. Traditionally, work teams have been under the scrutiny and control of supervisors who monitored the teams' work processes, resources, and decisions. More recently, work teams are being encouraged to be self-managed and autonomous and team members are increasingly involved in decision making. This approach is gaining favour with organisations as it has the benefit of reducing costs, enhancing productivity and product quality, as well as improving the work environment (Cohen and Bailey, 1997, p.242).

Although teamwork became more important and attractive as a management technique in the late twentieth century, much of the more recent interest in teams and teamwork can be traced back to the fashion for reorganising production processes into semi-autonomous work groups in the 1970s and 1980s (Thompson and McHugh, 2002). This movement was itself based on even earlier traditions such as the socio-technical approach, the 'Humanisation of Work' movement and the employee involvement trajectory (Batt and Doellgast, 2004).

The benefits of group working were first identified by researchers at the Industrial Fatigue Research Board (IFBR) in the UK. During the Hawthorne studies of 1924, and followed by the work of consultants at the Tavistock Institute of Human Relations in London in the 1950s, they discovered that teamwork boosted morale, reducing boredom and increased productivity. From then on, the concept of team working was recognised, developed, gradually adopted as a management technique and finally embraced eagerly by the Quality of Working Life (QWL) movement during the 1960s and 1970s. These studies of teamwork focused on morale and the implications that boredom had for employees' job satisfaction, productivity, absenteeism and labour turnover (Procter and Mueller, 2000).



In the 1980s, the use of team working became a fundamental part of developing a competitive advantage in the market, particularly when dealing with issues of product quality, customer service, problem solving, and so on (Buchanan, 1994). This led to the introduction of the concept of quality circles (QC)<sup>1</sup> and the subsequent prevalence of self-managing teams. In the late 1980s, the high performance work team (HPWT) was adopted to promote greater levels of involvement, commitment, and skill development among the employees. By that time, teamwork had become a popular management technique and the concept of flexible, empowerment teamwork was identified.

As Procter and Mueller (2000) note, until the mid-1980s the utilisation of work teams was still very much confined to the manufacturing industry, particularly the automotive sector. Then in the late 1980s, team working gained popularity in the service industries and the public sector in areas such as telecommunication, insurance, and the software industry. By the 1990s, the use of management teams expanded once again, this time in response to the changes and challenges arising from the development of a global business environment (Cohen and Bailey, 1997, p.243). As organisations sought to expand globally, there was great demand to provide rapid response so as to meet customer demands as well as to be able to cope with increasingly dynamic business environments. Hence, organisations modified their conventional team structures and continue to do so (Herzog, 2001).

With the development of Information and Communication Technologies (ICTs), workforce dynamics and working patterns have changed as illustrated by the increasing prevalence of the virtual team. The creative use of new ICTs has altered traditional spatial boundaries of work and has allowed organisations to experiment with new working practices and business models (Robbins, 2003). Virtual teams can therefore be defined as teams whose members collaborate closely across geographical, organisational and time boundaries with the use of ICTs (Lipnack and Stamps, 1997).

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<sup>1</sup> A quality circle (QC) is viewed as a group of people who do similar or connected work and who meet regularly (usually an hour a week) to identify, analyse, and solve work-process problems. Typically, a QC is comprised of six to twelve employees who are led by their first-line supervisor and assisted by a trained facilitator. (Denhardt et al., 1987, p.304)

### **1.3 Organisational Behaviour and Teamwork**

This current work looks further into intra-group relations as they apply to virtual teams. In particular it looks at team members' attachment to their teams and their collective behaviour. This research lies within the field of organisational behaviour as it investigates the effect of the entire team on employees' behaviour, as well as the impact of organisational structure on their behaviour within the organisations. There are various disciplines that focus on individual's behaviours within organisations – the dominant ones being organisation and social psychology, sociology, anthropology and political science (Robbins, 2005). Although the current study is based on a social psychological paradigm, consideration has been given to how these other disciplines have influenced research on employee behaviour and teamwork (Batt and Doellgast, 2004; Thompson and McHugh, 2002).

Marks (2005) and Batt and Doellgast (2004) note that the study of work teams has emerged mainly from the managerial tradition based on psychology or from sociology, where the latter provides a more critical point of view. Batt and Doellgast (2004) note that the psychological perspective concerns the internal characteristics of teams that lead to better performance; for example it may focus on productivity and employees' well being, whereas the sociological viewpoint interprets teams as regulating mechanisms and approaches teamwork as a way of controlling employees. As Katz and Kahn (1978) note, psychologists are concerned with the interaction of people's mind and behaviour while sociologists are more interested in the evolution of society, especially in the function of groups and the forms they take.

Indeed, in the study of organisational behaviour, psychology has contributed more to the knowledge of the individual or micro-level analysis, while sociology has provided more insights into the understanding of macro concepts, for example, group processes and their effects on the organisation (Robbins, 2005, p.12). Additionally, there is the sub-discipline of social psychology which is a branch of psychology that concentrated on the ways in which people influence one another. A brief discussion of the influence that psychology's micro-level approach has on sociology's macro-level approach to the study of teams follows.

### **1.3.1 Psychological and Social Psychological Perspectives**

Haslam (2004) notes that the psychological functioning associated with human behaviour was first identified by Wundt in Leipzig in 1879. Two of Wundt's students, J. McKeen Cattell and Hugo Münsterberg then took the interest in the relationship between psychology and behaviour further. They began to study individual differences in order to analyse organisational behaviour. In line with Taylorism, Münsterberg (1913) argued that it is necessary to analyse job requirements and to identify the key psychological components associated with productivity and individual aptitude. He then pointed out that identifying motivational backgrounds which would facilitate worker participation in the process of scientific management is essential. His investigation into the effect of personality and environment on job performance highlighted the fact that workers' reactions to their work are highly subjective. His work also showed that group membership played a role in determining employee satisfaction with their work. He then concluded that groups can make positive psychological contributions to the work environment (Münsterberg, 1913, p.234).

Although Münsterberg's work has had a major impact on the development of the psychological approach in the analysis of organisational behaviour, his work focuses mainly on individual differences, but neglects the social dimension of organisational life (Haslam, 2004). In the 1930s, Mayo and his colleagues acknowledged that individual's life can be transformed when working in groups – individual differences decrease in importance and similarities among group members increase. Yet, their work mentioned little about the psychological processes that cause this or made any mention of the importance of the individual's psychological make-up. Much later, in the 1960s, there was an increasing interest in the cognitive processes and the research of this period focused on the study of the individual thought processes that might account for particular patterns of organisational behaviour (Haslam, 2004, pp.6-12).

Research into the operation of teams from the perspectives both of social psychology and organisational behaviour was concerned with the internal characteristics within a team and its impact on good performance (Batt and Doellgast, 2004). However, there is a major difference between the two perspectives. Katz and Kahn (1978) note that what

distinguishes a social psychologist from a sociologist is that the former is primarily interested in studying the behaviour of an individual and how he relates to, or is affected by, the other members of the teams in which he works and functions, while the latter is more focused on the team as a whole and one team's relationships with another. Marks (2005) also mentions that social psychologists are not concerned with biological development or personality factors. Rather, social psychology provides an analysis of the psychological process that explains how employees' membership in teams and their social relations contribute to their organisational life (Haslam, 2004).

It seems to follow, therefore, that the social psychological viewpoint is an appropriate approach for the current study of social identity and conflict. Tajfel and Turner's (1979) Social Identity Theory (SIT) has been adopted as the dominant theoretical framework for this study, as this theory highlights the 'awareness of the reality of the group and its contribution to employees' social cognition and behaviour' (Cornelissen et al., 2007, p.5).

#### **1.4 Social Identity Theory and Alternative Approaches to Identity**

There are a number of approaches used in analysing identity or identification processes. Two most popular approaches are Impression Management (IM) founded by Erving Goffman (1959) and the model of 'Internal-external Dialectic of Identification' formed by Richard Jenkins (1996, 1998, 2000, 2004, 2008). Yet, Social Identity Theory (SIT), a third approach, is opposed to these approaches and is chosen to analyse identity and identification process in the present study because SIT adopts the group as the basic unit of analysis. This theory offers a mechanism for examining behaviour at both individual and group level i.e. it looks at the characteristic of groups as well as individual interaction within them (Lembke and Wilson, 1998).

Contrary to SIT, Goffman's IM perspective highlights the reflection of an individual role within a particular setting, which often ignores the interactions or the complexities of social settings. Likewise, Jenkins's work of identity focuses on individuals or the aggregate of individuals. Giddens (1989) notes that IM adopts a dramaturgical or theatrical perspective, stating that social interaction should be seen as being performances in front of the audiences i.e. 'on-stage performance'. According to Goffman, social life is viewed as

though performed by actors on a stage and the behaviour of these actors depends on their role they play at a particular point of time. Furthermore, people are concerned as to how well they are acknowledged and appreciated, both by others and by one-self. They tend to use many forms of impression management in order to ensure that others react to them in the desirable ways they wish. In teams, for instance, teamwork is often engaged in generating and presenting 'front-regions performance' whereby team members often project their formal or stylised roles on stage (Giddens, 1989, p.103), which may be somewhat divorced from their 'natural' disposition.

Extended from Mead, Goffman and Barth's thinking, Jenkins's model – 'The Internal-external Dialectic of Identification' describes how all identities (both individual and collective) are constituted (Jenkins, 2008, p.40). Jenkins (2000) describes that 'society' is made up of three domains - of individuals, of interaction between individuals, and of institutions, and that each of these domains cannot be considered in isolation. As Marks (2005) notes, Jenkins's work is more centred on individuals or the summation of individuals. He adopts the tradition of pragmatic individualism i.e. the view which involves 'no more than acknowledging the social world as, in the first instance, a world of embodied individuals' (Jenkins, 2000, p.10).

As described in Chapter Two, a team has its psychological underpinning and there is a cognitive and emotional association among its members. In other words, a team is a social entity, which one needs to look at as a unit of analysis, especially as a team contains and reacts to its own 'mind'. As a result, SIT appears to follow a more rational approach for analysing teams. In particular, the theory tackles the way in which virtual team members perceive themselves within the team and focuses on the psychological basis of intergroup conflict.

Social Identity Theory (SIT) (Tajfel and Turner, 1979) and its offshoot, Self-Categorisation Theory (SCT) (Turner, 1985) have been developed in the attempt to understand the psychological background of inter-group conflict and in-group bias. The core assumption of SIT, as Haslam and Ellemers (2005) describe it, is that individuals categorise and define themselves 'in terms of a group membership as they seek to identify with that group [...] having defined themselves in terms of social categorisation,

individuals seek to enhance their self-conception by positively differentiating their in-group from a comparative out-group' (Haslam and Ellemers, 2005, p.54). In other words, social categorisation requires the establishment of a distinct social identity which can lead to group members developing conflicting relationships with out-group members (which may either form part of the team they are working in, or be in another team) in order to enhance the positive qualities of their own experience of social identity (Tajfel, 1972; Tajfel and Turner, 1979). Such conflicting relationships often arise when people hold different opinions or understand issues differently from other people. The detrimental consequence of social categorisation as the basis for inter-group conflict implies that SIT and SCT are relevant theoretical foundations from which to analyse team identification processes and the impact they have on conflict within virtual teams.

As Tajfel and Turner (1979) describe, the psychological contribution of social identity has helped to 'create and define the individual's place in society' (as cited in Haslam and Ellemers, 2005, p.54). When an employee identifies him or herself with a group or team, in-group bias may occur. SIT suggests that the 'mere act of individuals categorising themselves as group members is sufficient to lead them to display in-group favouritism' (Haslam, 2004, p.19). However, individuals' identities can 'change quickly in response to contextual changes, and as a result, social identity is context-dependent not only in terms of which social identity is salient but also in terms of what form the identity may take' (Hogg et al., 2004, p.252). SIT also considers 'the extent to which people perceive group boundaries to be permeable and their group's relative position on a dimension of social comparison to be secure in the sense of being both stable and legitimate' (Haslam, 2004, p.24).

In its continuing development, SCT has subsequently contributed to the understanding of the cognitive approach of SIT. Turner (1978) argues that in order for an individual to switch on their social identity they need to go through a process of depersonalisation. As Hogg and Terry (2000a, p.123) describe, the process of depersonalisation means that self conception is transformed to be aligned with 'the contextually relevant in-group prototype'. Depersonalisation refers to 'a change in self-conceptualisation and the basis of perception of others' (Hogg and Terry, 2000b, p.5). When employees categorise themselves as

members of a group, similarities found within the group and differences between the in-group and out-group influence their identification within the group.

Organisational identification refers to the psychological attachment between an employee and his or her work organisation. This concept has received increasing interest from scholars, mainly owing to its effect on behaviour and its association with increased organisational performance (Benkhoff, 1997; Reade, 2001). Organisational identification can reveal itself at multiple levels in an organisation ranging from the organisation as a whole, the department, the office or work station down to the level of the team (Rink and Ellemers, 2007). Identification process, particularly process of self categorisation, is important mediator between the organisational context and organisational behaviour (Turner and Haslam, 2001). When individuals perceive their team identity as being positive and important to their self-conception, they tend to be positively motivated to conform to the team norm, and they have an increased desire to undertake and achieve team goals. This of course applies to virtual teams as well as physical ones and as a result, virtual team identity can be seen as being a psychological as well as a social reality (Haslam, 2004).

The identification process in virtual teams occurs at the interface of 'structure and agency' (Archer, 2002; Byrne, 2003; Ybema et al., 2009). Such an interface includes both the organisational context and the structures of teams, together with the cognition and pre-conception of employees. All of these influence the emergence of the individuals' social selves (Archer, 2002; Ybema et al., 2009). In some instances, employees can find themselves relating to a sub-group within a team (the out-group) because of differing views, experiences and ideologies. The way in which employees understand or become part of such a sub-group is linked to their social experiences and can reflect a person's nationality, gender, class, religion, work organisation or team. These aspects of a person's identity are influential in the meaning given to a team or sub-group. However, the choice of whether or not to identify with the team lies in the employees' assessment of their own personal impressions, feelings and experiences, and how comfortable they feel (Byrne, 2003). Because social identity has an impact on behaviour, social identity is not only a cognitive categorisation process that takes place in the employee's mind, but is also a result of those processes (Postmes et al., 2005). In other words, social identity has a bearing on

employees' perceptions, beliefs and intentions. It allows the thoughts in their minds to be converted into collective activities such as inter-group behaviour.

Scholars have used a variety of philosophical perspectives to interpret organisational identity and behaviour. Among the most important of these are positivism, interpretivism and constructionism (Alvesson et al., 2008; Saunders, et al., 2003). Instead of using the positivist and interpretivist approaches to understanding the formation of identity and its impact on conflict in virtual teams, the critical realist perspective developed by Bhaskar (1979, 1989, 1994, and 1998) has been adopted for the current study. This is because the world view and epistemological position of Critical Realism is better able to explain how an agent (the employee) interacts with the enabling and constraining effects of social structures (the team) during a social process (identification) (McEvoy and Richards, 2006). Through this perspective, an understanding of the interplay between the subjective world of agents and the objective and independent world of social structures can be sought (Archer, 1995, 2002).

A qualitative approach is adopted throughout this study because of its strength in describing and explaining 'human experience as it appears in people's lives' (Polkinghorne, 2005, p.137). Patton (1984) recognises a need to recognise, comprehend and expose the processes and mechanisms that individuals draw on to make sense of and to seek meaning in their own and others' behaviour. The qualitative approach has been considered when using the case study method as it is useful for studying different aspects of the processes and mechanisms underlying the identification processes and conflict and it is also helpful for examining them in relation to the social and organisational context (Gummesson, 2000). One aim of this research is to seek an understanding of contemporary phenomena within a real-life context by using the case study method (Yin, 1994).

## **1.5 Outline of the Thesis**

This thesis is organised into eight closely-linked chapters. An introduction to the thesis is followed by Chapter One which clarifies the key theoretical and real-work concerns of this study and outlines the supporting fieldwork involved. Chapter Two reviews the nature of both co-located (traditional) and virtual teams as well as the existing theories that have been



developed regarding them. The aim of Chapter Two is to review the nature, history, and evolution of workgroups, teams and team-based working which eventually led to virtual teamwork in the workplace. This is achieved by first defining and explaining what is meant by the term 'team'. The chapter then moves on to describe the evolution of teamwork from workgroups to virtual teams. This is followed by a section on the nature of virtual teams which presents details of the various structural characteristics of such teams. The challenges faced by employees being members of virtual teams are addressed. The final sections of the chapter deal with conflict in co-located or traditional teams and in virtual teams.

Chapter Three moves on to discuss Social Identity Theory (SIT). The theoretical conceptions and contributions of Tajfel and Turner's (1979) to SIT and Self-categorisation Theory (SCT) are discussed in order to provide the reader with an understanding of the psychological underpinnings and motivational background that can be found within the identification processes and inter-group relations in virtual teams. Much of the discussion considers the assumptions provided by SIT and SCT as they apply to various inter-group phenomena, particularly in areas of inter-group favouritism, inequality between groups, stereotyping and intra-group homogeneity and the process of changing inter-group attitudes through contact. The chapter also addresses some of the critiques and limitations of SIT and SCT.

Building upon the theoretical challenges identified in the previous chapters, Chapter Four develops a theoretical framework which seeks to explore identification processes and the impact that such processes have on conflict within virtual teams. This chapter begins by explaining how studying employee identity can help the researcher to better understand employee behaviour in the wider organisation. This discussion is followed by a look at the formation of identity within virtual teams. Challenges faced in the development and maintenance of virtual team identity are addressed. The chapter then looks at the cognitive and motivational source of identification in virtual teams, showing that social identity perspective is useful for understanding how employees enhance their feelings of inclusiveness within virtual teams. Identity is proposed to have an impact on employees' collective behaviour that in turn, can be related to conflict in virtual teams. Considering the available literature, it becomes apparent that SIT is the most appropriate theory to use in

order to answer the research questions at hand. Seven research questions are developed with the aim of first identifying the potential antecedents of identification, taking into consideration individual differences along with the influence of structural and environmental factors, and secondly, to examine the consequences and outcomes of the identification processes on inter-group relations, conflict handling behaviours and conflicts in virtual teams. These research questions are as follows:

***Research question 1:*** How do virtual team members categorise and identify themselves in virtual teams?

***Research question 2:*** What are the possible motivational factors that drive virtual team members to identification in virtual teams?

***Research question 3:*** To what extent do virtual settings impact on virtual team members' motivation to identify with their teams?

***Research question 4:*** What is the role of management in promoting identification in virtual teams?

***Research question 5:*** What are the possible conflicts that arise in virtual teams and what factors cause such conflicts?

***Research question 6:*** How do virtual team members react to and deal with conflicts arising in virtual teams?

***Research question 7:*** What are the factors that influence the choice of self-enhancement strategies and how they relate to virtual team members' behaviours associated with conflicts?

Chapter Five addresses the philosophical position and methodology used in the present study. The chapter develops and justifies this study's research design. The discussion begins by identifying the ontological and epistemological assumptions underpinning the current study. It is followed by an explanation of these choices as well as an outline of the

research design, its development and its execution. The research looks into seven multicultural virtual teams in four different companies. The chapter then moves on to describe the background of the organisations and the teams studied. The usefulness of Eisenhardt's (1989) research process for theory building and data analysis is then discussed. This chapter also presents the methods used for data presentation and analysis.

Chapter Six reports the research findings which are based on analyses of team member's identification processes and the effect such processes have on employees' inter-group and conflict handling behaviours. The chapter first presents an analysis of each of the seven cases. This is followed by analyses of each of the companies. Following the research questions developed in Chapter Four, this chapter then presents the collected qualitative findings. It does so by describing the psychological process of employee identification with their virtual teams. It also discusses the factors that drive employees to such identifications, the factors that contribute to identity-based conflict within the team, and employee responses and reactions to that conflict.

Chapter Seven draws together the findings and interprets them in relation to the research questions and the theories discussed in Chapters Two, Three and Four. The chapter analyses whether the findings of this research contradict or support existing theories by looking at previous studies that have dealt with issues of identity and conflict in virtual teams. By doing so, this chapter also identifies both the contributions that this study makes to the wider issue of organisational research and acknowledgement of its limitations.

Chapter Eight moves on to evaluate the overall significance of this research to the study of identity and conflict in virtual teams. It assesses the contribution made to existing teamwork literature and in doing so, identifies the contribution that this study makes to knowledge, pointing out its strengths and weaknesses. It then offers further suggestions for future research.

## CHAPTER TWO: TEAMS, VIRTUAL TEAMS AND CONFLICT

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### 2.1. Introduction

This chapter aims to give an understanding of the nature and structural characteristics of virtual teams. Section 2.2 starts by defining and describing the terms ‘team’ and ‘group’. Next, the chapter moves on to present a brief history of teams, explaining how they have grown and adapted from workgroup into today’s virtual teams. Within section 2.4, the nature of virtual teams is explored by outlining the notion of ‘virtual’ and defining the term ‘virtual teams’. The chapter then moves on to provide an overview of the social setting and organisational context in which virtual teams operate, by discussing the structural characteristics of teams. These characteristics include group characteristics, task characteristics, organisational environment and the information and communication technologies (ICTs). In section 2.6, the challenges faced by employees being members of virtual teams are identified and addressed. This is then followed by a discussion on conflict in teams, including virtual teams. Finally, the implications to the present study of the issues addressed in the chapter are identified and analysed.

### 2.2 Definition of a Team

The terms ‘team’ and ‘group’ are often used interchangeably in the management and academic literature, drawing no distinction between the two (Fisher et al., 1997). Yet on closer analysis a team is found to be different from a group. As Fisher et al. (1997) argue, differentiating teams from groups is important since the level of cohesive communal affiliations and mutual reliance established in teams cannot be found in groups. Therefore, members of the two may display different behaviour, resulting in different outcomes.

Teams are different from groups. In the current study, the word ‘group’ is used to indicate a sub-group or social group within the virtual team whereas the word ‘team’ represents the virtual team *per se* in most cases. It is argued therefore that a team can be identified as being different from a group. As a result, the description of a team dictates its own definition which goes beyond the definition of a group.

There are various definitions for groups and teams. In general, a group is a collection of people with something in common such as being in the same place and having a shared interest, whereas a team necessitates a greater interdependence and is aimed towards the achievement of an agreed objective utilising mutually agreed methods, usually within a given time period. For example, if there is a group of engineers, they could be grouped together according to their age, gender, experience, fields of expertise and so on. As Kazemek and Albert (1988) claim, what distinguishes a team from a group is that the former has 'a clear and common purpose and the members are aware of their interdependence on one another whereas the latter may not' (as cited in Fisher et al., 1997, p.233).

A team is defined as 'a collection of individuals who are interdependent in their tasks who share responsibility for their outcomes', and these individuals 'regard themselves as others see them' (Cohen and Bailey, 1997, p.241). In other words, a team is 'an intact social entity which is embedded in one or more larger social systems and who manage their relationship across organisational boundaries' (Cohen and Bailey, 1997, p.241). Given that work teams are the particular focus in this study, it seems appropriate to rely on a definition given by Kozlowski and Bell (2003) - these authors define work teams as a group of people who 'exist to perform organisationally relevant tasks, share one or more common goals, interact socially, exhibit task interdependencies, maintain and manage boundaries, and are embedded in an organisational context that sets boundaries, constrains the team, and influences exchanges with other units in the broader entity' (Kozlowski and Bell, 2003, p.334). A shorter definition for a work team by Sundstrom et al. (1990) is a 'small group of individuals who share responsibility for outcomes for their organisations' (Sundstrom et al., 1990, p.120).

Clearly, there are a few key features which define a team. The first feature in its characteristic as a social structure is that a team is made up of a number of people. The second feature is its unity of purpose, i.e. the team members as a team collectively pursue a common goal. A third feature is the sharing of responsibility by its members in order to achieve the agreed goal(s). This third feature is very important for the team members, who are interdependent and mutually accountable to one another.

Owing to the interdependent nature of teams, their members in an organisational capacity are 'not independent or socially isolated decision makers' - Instead, they are like social actors who are an intrinsic part of a complex network of relationships, both within and without that organisation (Kramer, 1991, p.195). In other words, team members' behaviour is influenced both by the place in which they are working and the context of the organisation. As a result, members' collective behaviour is determined in accordance with the context in which members in their relevant team operate. Their behaviour is also affected by the power relationships that exist between teams and the permeable boundary that defines team membership (Alderfer, 1987).

In a social system, a team has a 'psychological reality independent of interaction, cohesion or interdependence among its members' (Mansour-Cole, 2001, p.44). The psychological underpinning of teamwork is important for the management of teams. This is because the potential of a team not only depends on the skills, knowledge and ability of its members, but also on the emotional attachment of its team members to the achievement of the team goal (Lembke and Wilson, 1998). As suggested by Tajfel and Turner (1986), the process whereby individuals become productive members in a team is not only because of an aspect of behaviour but also a cognitive and emotional process of alliance.

Indeed, organisational theorists (e.g. Wisner and Feist, 2001) come to the same conclusion that a team is seen as an appropriate framework which can be used to achieve the aims and objectives of an organisation. In many businesses these days, a team is seen as the central unit of organisation, having a competitive advantage over the individual as it can bring together a variety of expertise, skills and experiences. Therefore, the inclusion of a network of teams within an organisation builds up a valuable asset in work organisations. Over the years, teamwork has evolved from the work group to today's virtual team-based working. The following section explains the evolution and development of teamwork from work groups to virtual teams.

### **2.3 From Work Groups to Virtual Teamwork**

Guest (2008) notes that the meaning of 'teamwork' comprises functional cooperation i.e. a group of people comes together for a practical purpose. He further notes that in the

workplace, 'functional cooperation is usually oriented toward efficient productivity and tangible output' (Guest, 2008, p.340). As described in the previous section, a team consists of a group of people linked with a common goal or purpose. Today, a team can work together either in a physical location e.g. in the same office building and they have regular face-to-face meetings (Reilly et al., 2006) or in different locations (geographically dispersed) and time zones but its members work together via the use of information and communication technologies (ICTs) (Chudoba et al., 2005).

Teamworking has evolved since the 1920s from what was called 'collective working' (Hawthorne Studies). In the 1960s and 1970s, most team work took the form of semi-autonomous or autonomous work groups, some of which have since evolved into today's virtual teaming (Buchanan, 2000).

In the 1920s, work groups had limited options and skills within their organisations. Jobs in early work groups were specialised and narrowly defined because people at that time were influenced by the idea of 'Scientific Management' or 'Taylorism' (Taylor, 1911). The core assumption of SM was developed by Frederick Winslow Taylor in the 1880s and 1890s. In general, the theory suggests that there is 'one best way' to organise and perform a job (Thompson and McHugh, 2002, p.30). Taylor noticed that because people used a 'rule of thumb' method in the work place, there was a lack of unified standards of work (Taylor, 2005, p.33). Taylor noticed that this caused a lot of inefficiency as well as mismatches between a worker's abilities and skills. He then suggested that a set of precise procedures and a high level of managerial control over work practices would increase workers' efficiency and productivity. Management should be separated from the workers on the shop floor. Taylor believed that workers were motivated by the pursuit of rational self-interest and that incentive wages would be the solution to most labour problems (Thompson and McHugh, 2002, pp.30-34).

Later, Taylor's ideas were opposed because of their effect of de-skilling and degrading workers (Holden, 1989). Taylorism was considered by some scholars to be, in practice, a failure (Edwards, 1979; Goldman and Van Houten, 1980). Although the ideology of Taylorism had been criticised, such criticisms did not end the long term diffusion of Taylorism as a management philosophy nor as a scientific approach to work (Thompson

and McHugh, 2002). Indeed, one of the contributions of Taylorism is that it assists management by establishing 'the technocratic rationale for authority in formal organisation' (Kouzes, 1980, p.132). As Holden (1989, p.200) notes, Taylorism is part of a wider pervading 'scientific culture' which remains strong in today's technological development, despite its evident shortfalls. Thompson and McHugh (2002, p.34) conclude that 'the problem of Taylorism is not whether it was introduced, but how, and its limits as a control system'.

In the late 1920s and early 1930s, a group of Hawthorne researchers together with the National Research Council of the National Academy of Sciences carried out research in a large Hawthorne plant making electrical appliances. These researchers attempted to identify relevant conditions that affected worker performance, so they examined the impact of environmental variables on a group of production workers (Jones, 1990).

As Thompson and McHugh (2002) describe, in Hawthorne's early experiments, the connection between the light intensity on the shop floor of manual work places and the workers' output was examined. These workers were divided into a test group and a control group in which the work environment of the former group was changed but the environment of the latter group was kept under normal and unchanged conditions. The researchers manipulated the lighting of the test group. What was found in the results was that the productivity of both groups increased under each increased level of illumination. The researchers then reached the conclusion that lighting had little effect on human behaviour. This result has led to further experiments to test the impact of a wider range of work environmental variables such as break time and having an incentive-based system. It was found that rather than increasing productivity on an individual basis, workers formed into a special group having its own identity, forming its own internal relationship. Any member whose performance deviated from the collectively imposed norm in the group was reprimanded by other workers (Thompson and McHugh 2002, pp. 45-46).

Sonnenfeld (1985, p.114) explains that an unanticipated group culture materialised in the Hawthorne studies through the emergence of group norms such as the restriction of output, informal leadership patterns, new friendship links, co-operation and group discipline. Indeed, the Hawthorne studies revealed that the economic incentive is not the only



incentive which motivates workers (as suggested by Taylorism), since other factors such as social needs can be an important sources of workers' motivation. Social interactions between group members tend to differ in accordance with the way in which they respond to environmental change.

Porter et al. (1975) note that the Hawthorne researchers were the first to focus on the social complexities in the workplace - 'from the time of the publication of the results of the Hawthorne studies onward, no one interested in the behaviour of employees could consider them as isolated' (Porter et al., 1975, p.22). Over the years, the Hawthorne studies have continuously contributed to studies in social science such as small group behaviour, organisational theory and management (Sonnenfeld, 1985).

In the 1950s, the idea of autonomous work groups was introduced to the workplace because of the need to maximize the effectiveness and efficiency of the social and technological aspects in organisations. Socio-technical systems theory was initiated by the Tavistock Institute in London (Trist and Bamforth, 1951) through their studies on the process of mechanisation in coal fields of the UK. It was then that organisations began to emphasise the relationship between humans and technology. This was because most systems in organisations are comprised of technical and social facets that are closely interconnected. This socio-technical concept began to be adopted across Europe, particularly in Scandinavia, which resulted in a substantial shift towards the humanisation of work in the mid-1970s (Procter and Mueller, 2000). Indeed, Socio-technical systems theory has been influential in the development of team working in Europe and the UK (Whybrow and Parker, 2000).

In the late 1970s, the development of team-based working was very much affected by the practices of Japanese industry. As a component of Total Quality Management (TQM) in the manufacturing sectors, the idea of quality circles (QC) was implemented whereby small work groups were formed on a voluntary basis and members were asked to meet, discuss and implement improvements to the production processes over which they had control (Shea, 1986).

Ross (1993) describes TQM as ‘an integrated management philosophy and set of practices’ that focuses on ‘continuous improvement, meeting customers’ requirements, reducing rework, long-range thinking, increased employee involvement and teamwork, process redesign, competitive benchmarking, team-based problem-solving, constant measurement of results, and closer relationships with suppliers’ (Powell, 1995, p.16). In Japan, TQM produces management techniques such as QC which were designed to encourage workers to participate in a group (formed by six to ten employees) to investigate and solve productivity and quality problems at work. Employee involvement is considered as critical to success, and management is discouraged from pressuring employees and QC leaders to participate (Norris and Cox 1987).

As Procter and Mueller (2000) note, before the mid-1980s, the utilisation of work teams was still very much in manufacturing industry, particularly in the automotive sector. Later on, the concept of work teams was expanded and applied to the service industry and to the public sector, for example, the telecommunications sector (Cohen and Ledford, 1994; Cohen et al., 1996; Spreitzer et al., 1999), insurance sector (Spreitzer et al., 1999), pharmaceutical service industry (Lloyd and Newell, 2000), UK postal service (Martinez Lucio et al., 1999), software industry (Marks and Scholarios, 2007), and hospitality industry (Richards and Marks, 2007).

By 1990, the use of teamwork had increased dramatically and become so common that almost 50% of the largest companies in the USA (Cohen et al., 1996) and 65% of the workplaces in the UK (Cully et al., 1998) reported that they used teamwork in the workplace. As Spreitzer et al. (1999) observe, unpublished data from the Fortune 1000 study indicated that 52% of service firms used self-managing work teams in 1993, which is an increase of 22% from 1987. In 1999, 72% of Fortune’s 1,000 companies had at least one self-managed work team (Lawler, 2001).

Examples of where work teams can be found in organisations are in project management, research and development, and management. Project teams are time-limited and members can be drawn from various disciplines and functional units to work on a particular project (Cohen and Bailey, 1997). For example, in forming a research and development (R&D) team, members with different areas of expertise will be selected from various departments

in the organisation. Upon the completion of a team's project or fulfilment of their fixed term of office, employees would normally continue in their professional position or maybe be given a future opportunity to become members of another team dealing with a new project.

As Cohen and Bailey (1997) suggest, members of a senior management team, which is usually comprised of a company's chief officers, are accountable for setting the company's overall goal and managing its performance. Being at the top level of an organisation, a senior management team is therefore, a group of strategic thinkers. They are chosen because they are able to have an overview of the way forward, are from different backgrounds with vast experience and have intuitive insights into the business, which is often supported by technical know-how. Collectively, therefore, members of a senior management team are dedicated to maintaining a healthy business in keeping with the wishes of the shareholders, protecting the interests of valued customers and shareholders and as well as seeking the dedication of employees (Cohen and Bailey, 1997, p.243).

Cohen and Bailey (1997) note that the recognition of the need to have senior management teams is becoming more common since such teams form a synergy whereby the complexity and challenges of today's global business environment can be handled. As organisations seek to expand globally, there is a growing demand for businesses that can respond rapidly to customers' expectations and cope with dynamic business environments. Organisations are modifying their traditional team structures into virtual ones (Herzog, 2001).

Today, with the advancement of the information and communication technologies (ICTs), dynamics in teams are changing. The revolution in telecommunications has broken the traditional institutional boundaries and allowed organisations to adopt different working practices and business models (Lipnack and Stamps, 1997). As telecommunicating is introduced into the work place, it allows for more flexible work patterns such as remote working and teleworking, so employees can now work simultaneously with more than one team which is scattered around different places. Virtual teams offer a flexibility that allows an organisation to take on tasks or projects that could not have been done with a traditional or co-located work team (DeSanctis and Poole, 1997).

The increased popularity of virtual teamwork in organisations has also spurred an interest in researching them. Various aspects of virtual teams have been studied in order to seek a better understanding of their nature and unique characteristics. The next section explores the nature of virtual teams, by presenting the definitions and various traits used in defining the notion of ‘virtual’ in the teams.

## **2.4 The Nature of Virtual Teams**

The term ‘virtual’ has been employed to explain a variety of different phenomena. For instance, virtual teamwork is now considered as work which can be done from home, office, cyber-café, or by the roadside (Davenport and Pearlson, 1998). A virtual team can be an *ad hoc* team formed by members from diverse locations, brought together in order to solve a particular problem (Jarvenpaa et al., 1998). Generally, a ‘virtual team’ is defined as a team that allows geographically widely scattered employees to work across time, geographical distance and organisational boundaries and who are linked by a network of information and communication technologies (ICTs) (Powell et al., 2004; DeSanctis and Poole, 1997; Lipnack and Stamps, 1997). The underlying characteristics of this type of team consist of dispersion, diversity and technological support.

In the past, several authors have defined virtual teams based on two differing characteristics. The first characteristic is the extent to which team members have face-to-face contact measured in terms of time and frequency (Fiol and O’Connor, 2005). Another characteristic is the extent to which members do not have face-to-face interactions (Griffith and Neale, 2001) but instead are geographically dispersed (Hinds and Bailey, 2003) and receive technological support (Griffith and Neale, 2001).

Having face-to-face contact seems to be a more important trait for defining a team as ‘virtual’ than characteristics such as geographical dispersion and technological support. This is because team members who are geographically close to one another still may never meet and thus they are no different from team members who interact across great distances. In this case, the detrimental effect of geographic dispersion may be insignificant (Fiol and O’Connor, 2005; Kraut et al., 2002). Therefore, this study proposes that the geographic dispersion that characterises virtual teams is a defining feature of virtual teams only to the

extent that it prevents the virtual team members from interacting face to face. In addition, even though most virtual teams use technology, this element may not be essential. This is because, as Fiol and O'Connor (2005); Griffith and Neale (2001) argue, it is possible that virtual teams may not utilise information and communication technologies (ICTs), upon which co-located teams may rely heavily. To further describe the nature of virtual teams, the following section addresses the structural characteristics of virtual teams, incorporating elements of the ICTs, the group and task characteristics, and the organisational environment.

## **2.5 Structural Characteristics of Virtual Teams**

From the definitions of virtual teams presented in section 2.2., the structural characteristics of virtual teams generally can be categorised under the headings of group characteristics, task characteristics, organisational environment and information and communication technologies (ICTs). Distinctive features of virtual teams include their predominant reliance on ICTs, their flexibility and their ability to go beyond traditional organisational boundaries and time constraints.

The efficiency and effectiveness of virtual teams is affected by team dynamics such as the proximity of team members to one another and composition of the teams. In addition, the team's performance is affected by the dependency and complexity of the task, the decisions members make, the organisational culture and structure and the use of ICTs. These factors differ from one virtual team to another (DeSanctis and Poole, 1994; Lurey and Raisinghani, 2001).

### **2.5.1 Group Characteristics**

Diversity in the workforce composition includes 'social category diversity', 'informational diversity' and 'value diversity' (Jehn et al., 1999, p.741). Social category diversity refers to 'explicit differences among group members in social category membership such as race, gender and ethnicity' (Jehn et al., 1999, p.745; see also Jackson, 1992). Social category diversity is also called demographic diversity (Williams and O'Reilly, 1998). Informational diversity is understood as 'differences in knowledge bases and perspectives that members

bring to the group' and such differences tend to 'arise as a function of differences among group members in education, experience and expertise' (Jehn et al., 1999, p.743). Value diversity occurs when group members 'differ in terms of what they think the group's real task, goal, target, or mission should be' (Jehn, et al., 1999, p.745). Virtual team members may come from different backgrounds, especially the level of their educational qualifications and the nature and of their relevant experience.

### **2.5.2 Task Characteristics**

The given aims and objectives of a virtual team identify the tasks for members, enabling them to apply their skills to those tasks. This in turn shapes the ways in which members will address subjects and communicate with each other in the overall process of consultation and decision-making within the teams. Hence, it is of importance to consider what type of tasks members are engaged in, the complexity of tasks, the degree of task interdependence as well as the way decisions are made in virtual teams. Functions performed in a virtual team influence its structure and length of tenure. The life span of a virtual team varies according to the team task and its associated goal (Earley and Mosakowski, 2000). For instance, management and functional teams are often described as on-going or long-term teams, whereas project and *ad hoc* teams are often considered as temporary and work on non-routine, highly skilled, technical or administrative projects (Saunders and Ahuja, 2006).

Often, the type of task a team is charged with completing is linked to the complexity of the task. As Brown and Miller (2000) note, most definitions of task complexity involve several attributes such as information load, number of subtasks and the uncertainty of a task. These authors indicate that for a more complex task a team may require the use of more consultative, decentralised decision-making structures, open communication strategies and tools in order to facilitate discussions and negotiations. On the other hand, simple routine tasks that have established procedures for completion may require relatively fewer information-processing structures (Brown and Miller, 2000, pp.135-136).

Both the type of the task and its complexity have an effect on the task interdependency in virtual teams. As Hertel et al. (2005) notes, 'task interdependence describes the degree or

requirements of task-driven interaction among group members' (Hertel et al., 2005, p.77). Members obviously need to rely on professional input from their colleagues on the teams, and the degree of team members' interdependence as well as the smooth running of such interaction have an impact on work flow (Thompson, 1967) and team members' collective behaviour within their virtual teams (Wageman, 1995).

### **2.5.3 Organisational Environment**

Culture and organisational structure are part of the organisational environment (Chudoba et al., 2005). In a virtual team with members distributed across different organisations, countries and continents, cultural differences may have a significant impact on communications and coordination in the virtual teams (Robey et al., 2000). In addition, the organisational structure of a virtual team influences the way members achieve their desired outcome. As a result, both the cultural and structural differences in virtual teams are taken into consideration in this study in order to seek a better understanding of team dynamics.

Culture is defined as 'the collective programming of the mind which distinguishes the member of one group or category of people from another' (Hofstede, 1984, p.51). Spencer-Oatey (2000, p.4) describes culture as the 'attitudes, beliefs, behavioural norms, and basic assumptions and values [...that] influence each member's behaviour'. In brief, culture is a set of shared values which defines appropriate attitudes and behaviour in virtual teams.

Over the years, some researchers have looked at the differences between national cultures in multinational companies (Hofstede, 1980, 1984, 1991; Triandis, 1994). However, the work of these authors has been criticised by Schwartz (1992) and McSweeney (2002) for assuming, first that all team members of a culture share the similar cultural attribute, and second, for expecting that individuals' values and behaviours are wholly determined by their cultural background. By assuming a uniformity of national culture, Hofstede and Triandis's work has neglected to demonstrate the richness and diversity of attribution of national institution and culture (McSweeney, 2002). Although the work of Hofstede and Triandis has been criticised by other researchers, their work still provides a basis for the discussion of national practices, particularly issues relating to national culture.

Apart from nationality and ethnicity, culture also manifests itself in organisational settings. Organisational culture is identified within an enterprise as a characteristic thereof, and is not seen in an individual *per se* (Hofstede, 1998). It is a deep rooted structure found in every organisation. Different organisations have different cultures that are manifested in the core principles and beliefs that they hold (Kayworth and Leidner, 2000). In an organisation, therefore, individuals may have different national or ethnic backgrounds as well as different cultural beliefs created by the organisation for which they work.

Understanding organisational structure is important when studying organisational environment (Chudoba et al., 2005). Past research that has studied organisational structure in virtual teams has concentrated on the use of ICTs (DeSanctis and Poole, 1994), the decision-making structure (Kiesler and Sproull, 1992; Straus and McGrath, 1994), the boundaries of management and organisational support (Hertel et al., 2005) and the effect they have on the communication processes and outcome of virtual teams within them.

Often, decision making structures and communication networks are inter-related (Brown and Miller, 2000). Kiesler and Sproull (1992) argue that virtual teams that are supported by information and communication technologies (ICTs) tend to take a longer time to reach consensus, make worse decision, and have increased levels of anti-normative behaviour. Subsequently, this may lead to greater dissatisfaction among the employees who work in virtual teams as compared to those working in traditional or co-located teams. In Tushman's (1979) study of work characteristics and subunit communication structures, he argues that a more decentralised work environment or team-centred network permits an efficient use of individuals as problem solvers since these patterns raise the opportunity for feedback and for generating different ideas for improvement. Decision making processes within such environments tend to welcome more participation and interaction from the team members. Furthermore, the sufficiency and availability of information within the teams is also important (Tushman, 1979, pp.84-85).

On the other hand, in a more centralised or leader-centred network, there tends to be less internal flexibility within the teams as it is likely for members to receive more direct supervision from people at a more senior hierarchical level, resulting in limited number of participants and discretion in decision-making processes (Cameron et al., 1987). It can be



seen, therefore, in virtual teams where the members are decentralised and scattered around in different locations that communication and coordination is primarily (sometimes, exclusively) based on ICTs such as e-mail, fax, phone, teleconference, video conference, and so on (Sproull and Kiesler, 1991).

Indeed, the use of ICTs in virtual teams raises issues concerning media richness, social presence and appropriateness (Van Der Smagt, 2000). 'Rich' media are communication tools such as video-conferencing which transmit higher levels of non-verbal cues and more closely resemble face-to-face-meetings whereas 'lean' media refers to those with limitations. Lean media such as e-mail lacks immediate feedback as well as verbal and non-verbal cues. As Zack (1993) notes, past types of media used for communication are linked to social presence as well as to appropriateness. Social presence acknowledges the extent to which two or more individuals can connect and relate to each other as being psychologically close or present (Fulk and Boyd, 1991). Social presence can be experienced verbally, or through body language, dress code as well as in the speed and continuity of feedback (Rogers, 1986). In face-to-face meetings, individuals experience more social presence, as such meetings offer more socio-emotional and non verbal cues than lean communication such as e-mail.

As suggested by Short et al. (1976) in their use of social presence theory, the selection of ICT media needs to take into account the type and amount of interpersonal involvement required to complete a given task. For example, media which carry rich, non-verbal cues are more suited to complex team tasks. This type of media, however, is seen to be more vulnerable for nurturing ambiguous situations especially in non-routine circumstances. Conversely, lean media which carry limited, non-verbal cues (usually in writing) are useful for handling repetitive or routine situations (Daft and Lengel, 1984; Hiltz et al., 1986). In virtual teams, both practitioners (Duarte and Snyder, 2001) and academic literature (Lipnack and Stamp, 1997) have proposed that the use of 'lean' media in communication in a complex and ambiguous task is inappropriate. Choosing an appropriate medium for communication has a profound impact on a team's performance (Daft et al. 1987; Lengel and Daft, 1988; Zack, 1993).

In general, understanding ICTs is vital to understanding the way virtual teams function, as most virtual teamwork is supported and facilitated by such technologies. The use of ICTs not only enables team members to work simultaneously with several projects in several teams (virtual or co-located), it also has an impact on members' relationships within their teams (Kraut et al., 1998). For example, communication was found to strengthen psychological ties among the members of a virtual team, as it allowed them to share norms, values and culture (Wiesenfeld et al., 1998).

The boundaries of management and organisational support also influence a team's effectiveness (Devine, 1999; Krech et al., 1962). Such support may be necessary in the virtual teams. Employees who work in virtual teams may also handle other tasks or projects with members in co-located teams. Sometimes, the interest of the team in the home site may be in conflict with the interest of the entire virtual team (Axtell et al., 2004). As a result, an effective organisational support and resource management is important to develop a closer bond between the virtual employees as well as to reduce clashes of interest. The intervention and support of management plays an important role in integrating an organisation's scattered workforce.

In conclusion, this section discusses the differences between virtual and co-located teams by exploring the nature of virtual teams as well as their structural context. This discussion included group and task characteristics, the organisational environment of the virtual teams, as well as the ICTs used for communication within the virtual team. Clearly, the performance in virtual teams is affected by its nature, structure and composition. As described in the introductory chapter, the use of virtual teamwork in the workplace has brought numerous benefits both to organisations and to employees. At the organisational level, virtual teams offer strategic advantages in terms of cost-saving, the ability to pool resources across organisational boundaries, and the ability to provide rapid responses to meet customer demand. From the perspective of the individual employee, virtual teams can provide greater flexibility at work, particularly in terms of time management (Pape, 1997). Nevertheless, the use of virtual teamwork is a complex issue that has raised challenges for the organisations using it (Iacono and Weisband, 1997). The following section explores the potential challenges that employees face as members of virtual teams.

## 2.6 Employees in Virtual Teams

Virtual teams have become more popular in recent years and their increased use has resulted in a similar growth in research into how they are utilised in organisations. Following Powell et al.'s (2004) review of current literature, this section discusses the challenges faced in relation to issues on 'inputs', 'socio-emotional processes', 'task processes' and 'outputs' associated with virtual teams (Powell et al., 2004, p.7). According to these authors, 'input' refers to the design and composition characteristics of virtual teams. 'Socio-emotional processes' refers to relationship building, cohesion and trust. 'Task processes' are factors that are related to task completion or achieving group goals as well as issues surrounding communication, coordination and task-technology fit. 'Output' refers to team performance and issues such as the quality of the decisions made and members' satisfaction (Powell et al., 2004, pp.8-12).

Past research has studied the impact of input on task processes and socio-emotional processes in virtual teams as well as the effect they have on output. For example, the study by Majchrzak et al. (2000) shows how an inter-organisational virtual team adjusted to using collaborative technology. They indicated that the design of the virtual structuring affects the extent to which team members developed and used a common language which helped towards their having a good shared understanding (Majchrzak et al., 2000, p.569). Given the diverse nature of virtual teams, challenges that affect performance and satisfaction of team members can be considered to be elements of a team's task and socio-emotional processes.

Powell et al. (2004, p.11) studied task processes and identified 'communication', 'coordination' and 'task-technology-structure fit' as the main challenges that team members face. They note that virtual settings present particular challenges when it comes to having effective communication. Challenges faced are a result of geographic distance between virtual team members (Cramton, 2001) and the reliance on ICTs (Sproull and Kiesler, 1986). Cramton (2001, p.346) proposed that 'maintaining mutual knowledge' is often the basic problem for collaborating physically distributed teams. In her study of virtual teams, she identified a series of problems that constitute failures of mutual knowledge. These problems were related to failure in communicating and retaining contextual information,

specific difficulty in communicating information and understanding its importance, information being distributed unevenly, as well as problems related to speed of access (Cramton 2001, p.355). Indeed, the geographic dispersion of the virtual employees resulted in delayed communication, misinterpretations and only minimal participation by remote virtual workers (Cramton, 2001; Mark, 2001). Further, the reliance on ICTs to replace face-to-face meetings tends to restrict communication as these technologies can only transmit a limited set of cues in their procedures (Sroull and Kiesler, 1986).

With regard to co-ordination in virtual teams, past research has highlighted the significant difficulty in co-ordinating virtual teamwork across different time zones and with a diverse workforce. Studies have also highlighted the vital role of ICTs (Galegher and Kraut, 1994; Kayworth and Leidner, 2000; Sarker and Sahay, 2002). The results of Kayworth and Leidner's (2000) study suggest that cultural differences significantly impact team members' ability to exchange ideas with one another and to coordinate the team project. The issue of cultural diversity is a common problem in virtual teams and it is often related to language barriers. Linguistic differences between team members can lead to the loss of a great deal of information as well as other distortions as the team members attempt to decipher their colleagues' communications through their own cultural perspectives.

Likewise, in Galegher and Kraut's (1994) study, the use of ICTs without also having face-to-face meetings was found to be restrictive, especially in the case of work which needed to be completed when there was ambiguity in what had to be done, usually because of having more than one interpretation at various stages without having face-to-face meetings. Their results suggest that virtual team members who use ICTs find it much more difficult to carry out their work because of weaker ties with their virtual team members as compared with those in traditional or co-located teams. Nevertheless, this study finds that students in virtual teams finish assignments and submit reports of similar quality as those carried out by students in a more traditional way.

As Powell et al. (2004) note, several studies (e.g. Hollingshead et al., 1993; Robey et al., 2000) have demonstrated the importance of task-technology fit. Powell et al. (2004, p.12) argue that the choice of technology is linked to its accessibility, the requirement for documentation, and the importance of the team's task. Research study by Hollingshead et

al. (1993) on the effect of computer-mediated communication and task type on performance in virtual teams indicates that the reduced non-verbal cues associated with the substantial use of ICTs is what causes virtual teams to take more time in decision making than traditional teams. Hollingshead et al. (1993) also implicate ICTs in the inability of virtual team members to make inferences about their colleagues' knowledge and anticipate their responses.

Previous research has looked into how closely members in the team worked together, trusted each other and developed work relationships when they studied the socio-emotional processes in virtual teams (Powell et al., 2004, p.9). This is because the geographical dispersion of members and the resulting reliance on ICTs make it more difficult for them to build relationships with their team mates. Such difficulty can adversely influence cohesion (Robey et al., 2000) and trust (Jarvenpaa and Leidner, 1999) in virtual teams. As demonstrated in the study of Chidambaram (1996), the use of ICTs affects processes of interaction among the team members and processes such as accumulation of messages, feedback and ideas may gradually reveal group feeling and attitude (Chidambaram 1996, p.158).

Kirkman et al.'s (2002, p.67) study in Sabre Incorporation identified several socio-emotional challenges to virtual teams such as 'building trust, cohesion, and team identity' and 'overcoming the feelings of isolation' among team members. Feelings of isolation, loss of identity, or lack of a sense of belonging (Cramton, 2001; Ahuja et al., 2004) can lead to problems such as mistrust among team members (Jarvenpaa and Leidner, 1999) and unfavourable sub-group dynamics such as ethnocentrism<sup>2</sup> (Cramton and Hinds, 2005).

In summary, challenges arising from socio-emotional processes indirectly influence performance in virtual teams. The current study addresses the socio-emotional challenges faced by members of virtual teams. Although a virtual team is often formed with the aim of accomplishing a common goal or purpose, it is also a social network in which the team members can fulfil their social needs. Often, people join and work as a team not only because they feel that their efforts will be appreciated and valued but also because they

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<sup>2</sup> Ethnocentrism is defined as 'regarding one's own ethnic group as of supreme importance' (Oxford English Dictionary 1989, p.424)

enjoy the relationships they have with their team mates (Baumeister and Leary, 1995; Lim, 1997). However, the social and psychological effects of geographical dispersion of team members in virtual teams and their reliance on information and communication technologies to communicate are likely to have a negative impact on their relationship building, which in turn leads to more conflicts (Hinds and Bailey, 2003, p.615). Overcoming socio-emotional challenges may improve employees' well-being and job satisfaction as well as their relationship with one another, thus assisting in improving team performance (Powell et al., 2004; Victor and Stephens, 1994). It is therefore proposed that fostering good working relationships and strong psychological ties among the virtual workers is important in order to create cohesion and build trust, which in turn can reduce conflict and enhance performance in virtual teams.

## **2.7 Conflict and Teams**

Employees who experience interpersonal conflicts with their colleagues within their team are likely to feel less satisfied with the team to which they belong (Argyris, 1962). However, the effect of conflict on team performance varies according to the type of conflict.

In the current study, conflict within virtual teams is examined. Conflict occurs when team members perceive disagreement and incompatible of desires around situations concerning their work and associated tasks, and extending to related socio-emotional issues concerning relationships (Amason, 1996; Jehn, 1995). Organisational conflict is defined as 'an interactive process manifesting itself in incompatibility, disagreement, or dissonance within or between social entities (i.e. individual, group, and organisation)' (Rahim, 2001, p.18). According to Roloff (1987, p.496), such conflicts arise 'when members engage in activities that are incompatible with those of colleagues within their network, members of other collectives or unaffiliated individuals who utilise the services or products of the organisation'.

Indeed, organisational psychologists have regarded conflict as a process beginning when an individual or a group identifies an opposition or other differences between his/her own interests, beliefs or values, and those held by another individual or another group (De Dreu

and Beersma, 2005, p.106). As Korsgaard et al. (2008) note, a process-oriented view of conflict highlights the role of perceptual processes and emotions in conflict. The ways in which individuals interpret and respond to conflict are governed by their mindset and infused with affective reactions. An individual's behavioural response to conflict may deviate substantially from what might be considered as a rational response in general.

Conflict within organisations can be disruptive at different levels. In teams, conflict can affect performance. For example, team members might be distracted from their tasks, or conflict might undermine positive relationships among the members to the extent that colleagues become dissatisfied with each other and with the team's efforts (Druskat and Wolff, 1999; Wageman, 1995). As a result, team members' motivations and their ability to perform as a team might be reduced. As Balkundi et al. (2007) note, the tension and dispute in relation to conflict within the teams can create strong dissonance among the team members.

Traditionally, organisational research on teams and research on conflict have proceeded somewhat independently (Bettenhausen, 1991; Bettenhausen and Murnighan, 1985; Hackman, 1990; Rubin et al., 1994). Nevertheless, research in more recent times has indicated that conflict has a significant impact on team functioning (Eisenhardt and Bourgeois, 1988; Jehn, 1995, 1997; Simons et al., 1999). These researches have looked at how teams are affected by different types of conflict. For instance, Jehn (1995) examined how different types of conflict can affect performance within teams and they concluded that conflict can be either constructive or destructive. They proposed that identifying situations in which conflict leads to positive and negative outcomes would provide insight into effective conflict-management strategies. In their studies, they identified and analysed factors that contribute to the positive and negative effects of conflict in teams (Jehn, 1995, pp.257-259).

Korsgaard et al., (2008) note that previous studies of antecedents of conflict within teams have mainly approached conflict as a shared perception or experience among team members. They suggested that factors such as the attributes of a team's task, the structure of the team and its psychological characteristics (e.g. diversity, organisational structure of the team, norms and climate) could give rise to conflict within a team. To elaborate further,

potential sources of conflict also include real or perceived competition over scarce organisational resources as well as different perceptions over what team goals, member roles, and team tasks should be.

In teams, there are many different types of conflict such as relationship, task and process conflict (Jehn et al., 1999; Hobman et al., 2002). Relationship conflict, also known as 'affective' or 'interpersonal' conflict (see also Rahim, 2001, p.21), consists of affective elements such as tension and friction and as well as business issues. It frequently includes issues which are personal such as having a particular dislike of a member in the team as well as being affected by things which frustrate and irritate oneself (Pelled et al., 1999, p.2). Task conflict, on the other hand, is centred on work issues and arises mainly from team members having different and perhaps clashing ideas, opinions, and viewpoints regarding the team's task in hand (Jehn et al., 1997, p.288). Process conflict arises because of a disagreement in the wider aspects of the team's work such as the way it handles a task, the processes it adopts and the overall methodology it uses (Hinds and Bailey, 2003). In particular, this type of conflict involves 'issues of duty and resource delegation, such as who should do what and how much responsibility different people should get' (Jehn and Mannix, 2001, p.239).

Task, relationship and process conflict can be either harmful or productive. Each type of conflict can have different end results. For instance, some argue it is the relationship conflicts which may result in the greatest negative impact on employee effectiveness in teams, whereas task-related conflict tends to promote teamwork (De Dreu et al., 1999; Jehn, 1995, 1997). Nevertheless, if any type of conflict is poorly managed, it can lead to ineffective teamwork (McGrath, 1991).

Recently, more attention has been given to issues of conflict in the virtual work places and in particular, their impact on virtual teams. Indeed, studies have reported increased conflict in virtual teams owing to members having to struggle in order to identify with different viewpoints, with information which is not being clearly shared and with the inevitable tensions that can take place amongst scattered sub-groups (Armstrong and Cole, 2002; Cramton, 2001).



## **2.8 Conflict in Virtual Teams**

As discussed above, research on conflict in teams has identified several potential conflicts such as relationships, task and processes. These conflicts can also occur in virtual teams (see Mortensen and Hinds, 2001). Another type of conflict, known as identity-based conflict may also be present in virtual teams.

Rothman (1997) distinguishes identity-based conflict from interest- or resource-based conflict. He notes that identity-based conflict is ‘deeply rooted in the underlying human needs and values which together constitute people’s social identities’ (Rothman, 1997, p.6). This conflict is more abstract and intangible than interest- and resource-based conflict, the latter of which are also more clearly defined with outcomes that are bounded by the resources at stake, for example, wages, funding, raw material, and so on. However, Rothman (1997) argues that while identity-based conflicts may be expressed as material disputes, not all interest- and resource-based conflicts contain identity-based elements. Often, it is possible for a conflict to involve dispute over resources, interests, and identity, as they are not mutually exclusive (Rothman and Olson, 2001).

Identity-based conflict based on factors such as nationality, ethnic origin, religion or gender can be found in the workplace (Dalton and Chrobot-Mason, 2007). In work teams, this type of conflict may occur when the members perceive that their identity is being threatened. Diversity of race, gender, ethnicity, age, and other personal qualities may lead to identity-based conflict (Rothman, 1997). Therefore, identity-based conflict tends to be more prevalent in virtual teams which have members scattered across a country or across the world and which have different cultural backgrounds from one another.

Past research has indicated that conflict is prevalent and inevitable in virtual teams and generally, has proved to be hard to reduce and therefore to manage (Hinds and Mortensen, 2005). Conflict arises in such teams because of the geographical distance that separates the team members, differences in the composition of the workforce and the reliance on ICTs (Hinds and Bailey, 2003; Armstrong and Cole, 2002). These issues will be discussed in this section of the chapter.

### **2.8.1 Geographical Dispersion**

In virtual teams, the impact of geographical dispersion of the members on team performance is significant when it prevents face-to-face meeting and restricts members' opportunities to communicate. The geographical dispersion may bring negative social consequences and subsequently hinder the development of understanding and relationship building among the team members; this in turn can result in conflict (Armstrong and Cole 2002; Hinds and Bailey, 2003; Pelled, 1996). Examples of the negative impact of geographical dispersion are miscommunication (Olson and Olson, 2000), feelings of isolation and detachment (Ahuja and Galvin, 2003; Chidambaram, 1996; Lipnack and Stamps, 1997), and conflict escalation (Armstrong and Cole, 2002).

Hinds and Bailey (2003) and Jehn et al. (1999) argue that in virtual teams where shared social settings (such as office buildings, meeting rooms, and cafeterias) are absent or less visible, building common behavioural norms becomes a challenge. This is because different contexts may produce different behavioural norms that are inconsistent with those of one's colleagues. As a result, team members may have different perceptions and expectations of one another. Consequently, misunderstandings and conflict may arise among virtual workers located in distant sites. In addition, the geographical dispersion of team members may foster divergent perspectives concerning the work being undertaken as well as how the members should work together. When the team members, having considered their work, find that they have different understandings thereof, then it is more likely that task conflict will result.

Distance is a multifaceted concept, incorporating not only geography but also time and culture (Armstrong and Cole, 2002). When virtual team members are working across multiple time zones, scheduling and co-ordinating work activities may be challenging, particularly when the members have different perceptions of time (Saunders et al., 2004). For instance, differences in time zone may cause delays in communication and problems in co-ordination (Sarker and Sahay, 2002).

Working across long distances also leads to a lack of spontaneous communication among virtual employees. This contrasts with the informal and unplanned social interactions one

finds among co-located employees. As a result, distance may consequently reduce causal contact which is an important feature of relationship building (Hinds and Mortensen, 2005; Kiesler and Cummings, 2002). Hence, virtual employees may have fewer opportunities to get to know one another. When team members do not have the opportunity to familiarise themselves with the characters of their colleagues and their involvement in work, as well as work processes involved to accomplish the team goal, misunderstandings and conflicts are more likely to happen (Hinds and Bailey, 2003).

Geographical dispersion of virtual employees has resulted in less shared context and problems with communication as well as with relationship building. All these factors may lead to misunderstanding and conflict in virtual teams. Furthermore, diversity of workforce composition may have a negative impact on work processes and teamwork. This diversity may cause discrepancies between the attitudes and values held by different team members, thus giving rise to conflict when members interact (Oetzel et al., 2001).

### **2.8.2 Differences in the Workforce Composition**

Past research has reported that there is no common agreement as to how workforce diversity affects team performance (Eckel and Grossman, 2005). In some studies, diversity has proved to be beneficial owing to the combination of different information sets, talents, skills or visions which may lead to a more creative and effective team (Northcraft et al., 1995). In others, diversity has led to misunderstanding and conflict owing to poor communication between members as exemplified by the lack of face-to-face contact (e.g. Jehn et al., 1999; O'Reilly and Flatt, 1989). In other words, problems in collaboration and integration may arise among members who have different backgrounds, values and norms. This may lead to disagreements over the delegation of work and allocation of resources.

The work of Jehn et al. (1999) not only examines the effect of diversity on team performance but also distinguishes between different types of diversity. Their results demonstrated that value diversity is the most likely form of diversity to bring negative impact to team performance and employees' morale. However, informational diversity may increase task-related conflict which can enhance team performance, because having different viewpoints can add valuable dimensions to knowledge as issues are viewed from

different perspectives (see also Amason, 1996; Jehn, 1995). Furthermore, when task interdependency is high, the members' morale may be enhanced. Task independence and task type were found to have moderating effects on the relationships between diversity, particularly social category diversity and on various measures of group performance (Jehn et al., 1999, p.758).

As discussed earlier in this chapter, task characteristics such as types of tasks and task complexity influence task interdependence and decision choice in the teams. Two characteristics of task that have an important influence on conflict and performance are task interdependence and task routineness (Jehn, 1995).

Wageman (1995) argues that in teams which are substantially independent, a combination of skills and knowledge of the team members may be used effectively to accomplish a task. During the work processes, he found that team members displayed considerable communal strengths arising from collective responsibility and shared learning which combined to form high quality interaction, all of which strengthened performance outcomes. Interdependence can encourage the development of strong social norms which are highly desirable when, at the end of the day, a high level of co-ordination and co-operation are desired in the effort needed for task completion (Wageman, 1995, p.174).

On the other hand, high levels of interdependence can be detrimental to team performance if there are already underlying relationship conflicts such as dislike and friction among the team members (Kankanhalli et al., 2007). This can be seen in Jehn's (1995) study which researched into group conflict and how it impacted on interdependence in tasks and members' reactions. In her study, the interdependence required of team members was found to vary according to the type of conflict. Interdependence increased the detrimental effect of relationship conflict but decreased the detrimental effect of task conflict on team members' reactions. This is because members anticipated disagreement while discussing task-content issues, thus lessening this tendency to feel disappointed about the task-focused disagreements (Jehn, 1995, p.276).

As well as task interdependence, the impact of task conflict on group performance depends on task routineness. Task routineness refers to the degree of structure and programmability

of the task (Kankanhalli et al., 2007). As suggested by Jehn (1995), task conflict is positively related to team performance for non-routine tasks. Members of non-routine task teams reported that the need to work closely together and to discuss issues relating to the content of a task helped them to effectively finish the task in hand on time.

Conversely, task conflict is negatively related to team performance for routine tasks. Members performing routine tasks state that the negative impact of task conflicts was increased with high interdependence. This was the result of disruptions to standardised functions as independency interfered with the interaction needed to complete the task (Jehn, 1995, p.277). Overall, task interdependence and task routineness influence team performance. When examining the relationship between task characteristics and conflict within virtual teams, it is necessary to address the task characteristics, particularly the type and complexity of task.

It is important to pay attention to issues of cultural difference when studying the dynamics of virtual teams. Cultural differences may influence the processes of social incorporation that affect collective behaviour. In the past, many researchers have looked closely at the impact that cultural differences have had on performance in virtual teams. These studies suggest that cultural difference could well lead to problems with co-ordination (Johansson et al., 1999; Kayworth and Leidner, 2000; Robey et al., 2000) and communication (Kayworth and Leidner, 2000; Sarker and Sahay, 2002) within virtual teams. As Manstead and Hewstone (1995) note, people who shared similar principles and values tend to develop closer bonds with one another. These members are also more likely to achieve consensus on goals, tasks, and procedures. They are also more likely to have similar ways of interpreting events, all of which helps mitigate conflict in teams (Jehn et al., 1997). Conversely, team members with dissimilar cultural backgrounds may experience more problems in reaching an agreement or in adapting to different ways of doing things. Such incompatibility may lead to the creation of stereotypes about people from other countries and distrust of the team mates (Alexander 2000; Cascio 2000; Dash 2001).

The current study does not attempt to examine the impact of a particular national culture on teamwork. Nevertheless, this study helps to examine the extent to which cultural values held by employees may influence virtual team members' preferences for social interaction

norms. As Hong (2010) notes, differences in culture influence team members' preference for norms of social interaction – they feel comfortable interacting with those who are similar to them. In virtual teams involving people from a wide range of organisations, countries and continents, cultural differences may have a significant impact on communication and co-ordination in virtual teams. Both national and organisational culture may influence how members behave in their virtual teams.

### **2.8.3 Reliance on Information and Communication Technologies in Communication**

Employees who are separated by geographical distance have to rely on information and communication technologies (ICTs) in communication. Though ICTs enable the employees to connect across distance, the characteristics of ICTs and their adoption for communication may give rise to conflict in virtual teams (Kankanhalli et al., 2000). As Sproull and Kiesler (1991) point out, the use of computer-mediated communication may depersonalise member interaction and lead to conflict.

Hinds and Bailey (2003) argue that the shortcomings of information and communication technologies (ICTs) for communication may contribute to conflict in virtual teams. As described in the previous section, communication using lean media tends to offer lower levels of social presence and information richness in interaction than face-to-face meetings, resulting in confusion, incompatible interpretations, and conflicting viewpoints among virtual team members. Kiesler and Sproull (1992) argue that teams that are supported by ICTs for communication tend to take a longer time to reach consensus, make worse decisions, and have increased levels of anti-normative behaviour. Also, the use of ICTs leads to greater dissatisfaction among employees who are members of virtual teams as compared to those who work in physical or co-located teams.

The way conflict is handled and managed in a team is important. As Tjosvold (1998) has observed, dealing with conflict constructively promotes relationship-building among team members as well as effective task completion. For example, discussing conflict skilfully and openly within the organisation not only stimulates positive and creative work, but also increases motivation, especially in work that requires completing of shared tasks. In addition, members' interpersonal relationships in general can also be strengthened.

Additionally, the ability of employees to embrace different experiences and to manage disagreements is important (Tjosvold, 1991; Gruenfeld et al., 1996).

## **2.9 Conflict Handling Behaviour**

Conflict management has already, for some time, been a topic of research in social psychology (see Blake et al., 1964; Rahim, 1997; Thomas and Kilmann, 1974). Previous literature on this subject has looked closely at conflict management and has either used a team process approach, which considers the extent to which teams actively manage their conflict (e.g., DeChurch and Marks, 2001; Jehn, 1995; Lovelace et al., 2001; Murnighan and Conlon, 1991; Von Glinow et al., 2004), or has used a stylistic approach, which is an outgrowth or development of Blake and Mouton's (1964) managerial grid model and Deutsch's (1973, 1980, 1990) theory of conflict. One example of the stylistic approach is Rahim's (1983) Organisational Conflict Inventory in which different styles associated with individual conflict management behaviour are emphasised and examined.

Although developing conflict management techniques is useful for all organisational teams, it may be even more relevant and important for work teams which are self-managing themselves (Alper et al., 2000). This is because these teams are closer to the sources of errors and inconsistency in production, so they are in a better position to rectify such errors and variances (Pasmore et al., 1982). In addition, the team members are often expected to resolve problems and conflict on their own (Paul et al., 2004).

Past research has revealed that the conflict management behaviour of employees is related to satisfactory outcome of conflict resolution in virtual teams (Montoya-Weiss et al., 2001; Paul et al., 2004). It is then argued that members' conflict management behaviour has an impact on the success of virtual teams.

Rahim (1983) has established five conflict handling styles which are used to describe the conflict handling behaviour of virtual team members. These styles are avoidance, accommodation, competition, collaboration and compromise. The members' behaviours and concerns for themselves and others associated with their conflict handling style are displayed in Table 1.

Conflict handling Style	Behaviour	Concern for self			Concern for others		
		High	Mode-rate	Low	High	Mode-rate	Low
<b>Avoidance</b>	<ul style="list-style-type: none"> <li>- Intentionally withdrawing from the conflict situation.</li> <li>- Apathetic toward conflicting points of view and outcome.</li> </ul>			√			√
<b>Accommodation</b>	<ul style="list-style-type: none"> <li>- Focusing on areas of agreement.</li> <li>- Concerned more for others' needs and views than one's own.</li> </ul>			√	√		
<b>Competition</b>	<ul style="list-style-type: none"> <li>- Forcing one's own views on others.</li> <li>- Concealment of information, competitiveness and negative attitude towards alternative solutions.</li> </ul>	√					√
<b>Collaboration</b>	<ul style="list-style-type: none"> <li>- Integrating the views of all involved.</li> </ul>	√			√		
<b>Compromise</b>	<ul style="list-style-type: none"> <li>- Finding the middle ground.</li> <li>- Parties acknowledge differences in preferences.</li> <li>- Finding a common solution that addresses everyone's interest.</li> </ul>		√			√	

Table 1: Individuals' conflict handling style, behaviour and concern for self and others (adopted from Paul et al., 2004, p.192; Montoya-Weiss et al., 2001, p.1253)

These five conflict handling behaviours have different effects on team performance (see Montoya-Weiss et al, 2001). For instance, Van de Vliert (1997) found that typical ways or styles in which individuals handle conflict can result in two outcomes – a concern for one's own goals or for the other person's goals. Whilst conflict handling styles within virtual teams have been the recent focus in virtual team research, there is still a lack of empirical research looking at various processes and dynamics that lead to effective performance in



such teams (Clark and Gibb, 2006; Paul et al., 2005). Further investigation is required to identify factors that affect the choice of conflict handling behaviour in virtual teams.

## **2.10 Implications for the Current Study**

Increasing globalisation and the advantages offered by information and communication technologies (ICTs) have led to a rise in the use of virtual teams. Virtual teams allow geographically dispersed employees to work across time, space, and organisational boundaries using ICTs. While virtual teams have many benefits for some organisations, they also pose distinct challenges that are not usually encountered in traditional or co-located teams. These challenges are the result of difficulties created by increased employee diversity, the trials of working across many time zones, and geographical locations as well as the lack of non-verbal cues in virtual team members' communication. Lewis et al. (2004) observe that one of the keys to success in the electronic world is the appropriate management of human capital. Owing to rapid technological changes, traditional approaches to human capital management may no longer be relevant. In other words, one needs to look at both the potential benefits of new technologies and their social consequences as they may hamper the efficient functioning of virtual teams.

Geographical dispersion, diversity in virtual teams and the reliance on information and communication technologies (ICTs) for communication can have a negative impact on the socio-emotional processes of cohesion and identity building, which in turn has an influence on team performance (Kirkman et al., 2002). Issues such as cohesiveness among team members, and the extent to which they are attracted to and feel satisfied with one another are all closely related to conflict within the teams (Pelled, 1996). Promoting strong psychological ties and relationships among team members may reduce conflict in virtual teams (Mortensen and Hinds, 2001).

The current study strives to provide a better understanding of the antecedents and effects of conflict within virtual teams and to suggest ways to overcome such conflict. In particular, the study examines whether overcoming challenges in socio-emotional processes of virtual teams moderates the negative impact of conflict in the teams. Previous investigations into the socio-emotional processes of virtual teams have been concentrated on the importance of

building trust and cohesion, yet there has been still little analysis of, or theories explaining, the processes of relationship building in these new circumstances (Powell et al., 2004). Whilst virtual team members' interaction has been studied, little research has been conducted to look at the cognitive and emotional processes involved in teamwork in the virtual setting.

The aim of this current research is to examine the cognitive and emotional processes involved in virtual teamwork, especially those that lead to enhanced feelings of inclusiveness or belonging and relationship building. When looking at this issue, the topic of social identification becomes important. As already outlined in the introductory chapter, Social Identity Theory is adopted in the current study because of its strength in analysing the behaviour of individuals as members of a social group or team as well as its ability to account for inter-group conflict (Hewstone and Greenland, 2000). The theoretical underpinnings of Social Identity Theory and its relevance to the current study are discussed in detail in the following chapter.

## CHAPTER THREE: THEORISING SOCIAL IDENTITY

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### 3.1 Introduction

A development in organisational theory in recent years has been the increasing recognition that identity is a useful concept for understanding the organisational context and social environment in which groups function. This is because identity may lead to cooperative behaviour in groups which enhances organisational performance (Albert and Whetten, 1985; Kramer, 1991). Indeed, social identity can explain why employees are motivated to act on behalf of a team. It also enables research to predict collective behaviour. Drawing from social psychology, this chapter elaborates the theory of social identity and its impact on inter-group conflict. Introducing the concept of social identity also adds a new perspective to the study of organisations as a whole. In doing so, this chapter presents a theoretical frame of reference for the present study. Past research on inter-group relations and the concept of social identity, as developed by Tajfel and Turner (1979), are reviewed. The chapter starts by first looking at the reasons that brought about the formulation of Social Identity Theory (SIT), a set of theories developed largely to explain the ‘cognitive and motivational factors driving inter-group conflict, bias and discrimination’ (Alexander and Levin, 1998, p.630).

Identity is ‘established inside a particular social context and for a specific historic period, because context fosters the individual’s assimilation of identity contents, together with the rules to adopt and the beliefs or values to accept’ (Breakwell, 1994, p.4). It is seen as a construction, a practice that is never completed and always ‘in process’ (Hall, 1996, p.16). As Kohonen (2005, p.24) suggests, identity is seen as not stable but rather an ‘on-going, never-ending process’ (e.g. Allen et al., 1983; Giddens, 1991; Hall, 1992). Social identity, according to SIT, is ‘the individual’s knowledge that he or she belongs to a certain group together with some emotional and value significance to this group membership’ (Tajfel, 1972, p.292). In other words, social identity allows an individual to express his or her awareness of being a member of a social category as well as to express the consequent value he or she attaches to membership of that group.

SIT argues that developing an understanding of social identity will provide researchers with a rationale for teamwork. Thus, it is important to examine the process by which social identity is constructed as well as the process by which social identity has an effect on an individual's perceptions and motivations, particularly how they are 'motivated to work and think as a team' (Lembke and Wilson, 1998, p.941).

SIT (Tajfel and Turner, 1979) is one of the dominant inter-group references for social psychology. This theory has provided a powerful framework for analysing and understanding inter-group relations in social psychology. The current chapter reviews the theoretical approaches and empirical observations that have made use of SIT and Self-categorisation Theory (SCT) to explain and analyse inter-group relations. In particular, the chapter discusses the formulation of SIT and its strengths in analysing the identification processes and conflict in groups or teams. Contributions of the theories in the understanding of the inter-group relations and organisational research are also discussed. In addition, limitations of SIT are addressed and finally, implications for the present study are drawn.

### **3.2 Formulation of Social Identity Theory: Social Psychology and Inter-group Conflict**

Conflicts at work have always existed and yet have never been clearly understood. In recent years this has drawn the attention of many scholars, practitioners and academics from different disciplines including sociology, economics, social psychology, management and organisational behaviour studies (Lewicki and Lewin, 1992).

As Austin and Worchel (1979, p.1) note, the social psychology approach to inter-group relations focuses on the 'sources of, and solutions to, inter-group conflict or differentiation' (as cited in Dewsnap et al., 2002, p.876). Within social psychology, issues of conflict are often dealt with, either directly or indirectly, in theories and practical approaches to inter-group relations (e.g. Allport, 1954; Oakes et al., 1994, Sherif, 1958; Tajfel, 1981). This approach is used because conflict can happen within or between any and all types of group. In general, conflict is often defined as some sort of, 'incompatibility of goals, beliefs, attitudes, and/or behaviour' (Ashmore et al., 2001, p.7) or as, 'a particular kind of social

interaction process between parties who have mutually exclusive or incompatible values' (Mack and Snyder, 1957, p.212).

Research on inter-group conflict is based mainly on the theories of realistic conflict theory (RCT) (Sherif and Sherif, 1953; Sherif, 1966) and SIT (Tajfel and Turner, 1979) that were developed in the mid twentieth century. Both of these theories have become popular as established theoretical frameworks for understanding inter-group conflict. In fact, SIT was developed as a theoretical supplement to RCT, remedying its inconsistencies and developing further its explanation of inter-group conflict. In particular, SIT explicitly argues that inter-group competition is not a necessary condition for inter-group conflict (Dewsnap and Jobber, 2000). In order to better appreciate the contributions of SIT to the understanding of inter-group relations, one needs to first look at how and why the theory was first developed. The following section presents some of the problems and arguments which led to RCT and which subsequently contributed to the rationale for the formulation of SIT.

### **3.2.1 Realistic Conflict Theory and Social Identity Theory**

Although Realistic Conflict Theory (RCT) was useful for understanding the social situations that lead to group conflict, it had limitations (Brown, 1978). Taken together, RCT and Social Identity Theory (SIT) provide a broad yet realistic foundation for understanding the nature of group conflict as well as for understanding the role that social identity plays in conflict and conflict handling behaviour. Both RCT and SIT need to be considered and analysed in order to appreciate the foundation they provide.

The central argument of RCT is that inter-group conflict results from an atmosphere of 'realistic competition' which creates an environment for 'conflicting interests between groups' to emerge. RCT holds that competition over limited resources is the main cause of conflict and of the emergence of prejudice between groups seeking those limited resources (Liu and Allen, 1999, p.67-68). RCT holds that groups are not cognitive categories, rather they are interpersonal structures. The emphasis of RCT is on the interaction that takes places between two or more co-located groups. As such although not ignored, there was no

detailed thought or discussion of the psychological processes of individual members of these groups.

According to Brown et al. (2001), RCT proposes that the degree to which groups are dependent upon each other is often reflected in members' inter-group attitudes and behaviours. However, subsequent studies conducted on inter-group relations (e.g. Brewer and Campbell, 1976, Struch and Schwartz, 1989) found difficulty in testing RCT's hypotheses on interdependence. As a result, an alternative measure of interdependence was adopted. In addition to studying actual conflict, researchers also began to study perceived conflict and the impact this had on inter-group relations. However, measuring interdependence in this way is not an entirely accurate reflection of inter-group relations (Turner, 1981; Brown et al., 2001, p.82). Introducing the concept of perceived conflict also introduces ambiguity into RCT. Whereas previously RCT focused on the objective relationship of interdependence between groups as the critical component of inter-group relations, the introduction of subjective perception (as in perceived conflict) raised the question of whether studying perceived interdependence (rather than objectively measurable independence) was sufficient for developing an understanding of inter-group relations (Brown et al., 1986). Because of this ambiguity, the RCT approach became inadequate for explaining and analysing inter-group behaviour in organisations.

As Liu and Allen (1999) claim, the central argument of RCT is that inter-group conflict is the result of 'realistic competition' and 'conflicting interests between groups' i.e. members of two groups having conflicting interests may compete over limited resources or being the first to achieve a particular goal. This sort of competition is likely to lead to conflict, prejudice and biases between competing groups (Liu and Allen, 1999, pp.67-68). However, SIT argues that this is not necessarily the case. There are other factors that influence inter-group behaviour, for example, simply identifying oneself with one group over another can lead to inter-group conflict (Dewsnap and Jobber, 2000).

Owing to the contextual and empirical problems of RCT, SIT was developed to supplement the concept of functionalism proposed by RCT in explaining inter-group conflict (Brown et al., 2001). According to Tajfel et al. (1971), the development of SIT challenges RCT by proposing that inter-group bias cannot be fully understood if it is considered only in terms

of objective conflicting interests (Haslam, 2004, p.30). SIT thus serves as an addition to RCT's explanations of inter-group relations by exploring alternative sources of conflict and inter-group differentiation (Tajfel and Turner, 1979). How SIT interprets inter-group conflict is discussed in the following section.

### **3.3 Social Identity Theory and Inter-group Conflict**

Social Identity Theory (SIT) was formulated to explain inter-group discrimination in the minimal group paradigm (Tajfel, 1972; Turner, 1975, 1978). SIT was initially developed by Tajfel (1972) and later on by Tajfel and Turner (1979), who proposed it as a theoretical foundation for the understanding of the psychological underpinnings of inter-group discrimination.

Tajfel (1978) conducted a series of studies in order to identify the minimal conditions that lead to discrimination of group members in favour of their own group and against the out-group. These studies, termed as 'the minimal group studies' commenced with a study using a group of schoolboys who are assigned to one of two groups. These boys were informed that this assignment was made on the basis of fairly trivial criteria. After the boys had been informed of their membership in one of the groups, they received instructions to allocate money to other members of the two groups. The procedure of allotting money included restrictions. For instance, there were no face-to-face interactions among the boys and the membership of their group mates was kept anonymous (Schiffman and Wicklund, 1992).

Haslam (2004) notes that findings from this first study revealed that in allocating money between the in-group members and out-group members, the minimal group conditions were sufficient to encourage in-group favouritism i.e. the boys diverged from the strategy of fairness and displayed in-group favouritism by choosing the reward strategy that gave more points to the members of their own group. To investigate the process of in-group favouritism more closely, further study was carried out by Tajfel (Tajfel, 1978). Again, the boys were found to deviate from the strategy of fairness and they tended to opt for those strategies that maximised differences between the in-group and out-group in a way that favoured the members of their own group. Haslam (2004, p.19) notes that the boys were more motivated to enhance their 'relative gain' by comparing the out-group rather than

maximising their personal 'absolute gain'- what seemed to be important to those boys was not 'doing well' (i.e. to maximising the amount of money gained) but 'doing better than the other group'. Tajfel and Turner (1979) argue that one significant feature of the minimal group studies was that they demonstrated that the 'mere act of individuals categorising themselves as group members was sufficient to lead group members to display in-group favouritism' (as cited in Haslam, 2004, p.19). The results of the minimal group studies also challenged recognised theories of inter-group conflict (e.g. RCT) by revealing that there is a tendency that the understanding of in-group bias and inter-group discrimination would be limited if it is considered exclusively in terms of realistic conflict in interests (Haslam, 2004).

After the minimal group studies, Social Identity Theory (SIT) was subsequently extended via the formulation of social categorisation theory (SCT), which was developed by Turner and his colleagues (Turner, 1985; Turner et al., 1987). SCT describes how the categorisation of the self and others into a specific group generates, 'prototype-based depersonalisation of self and others and thus, generates social identity phenomena' (Hogg and Terry, 2000a, p.121). The core concept of SIT holds that group members are motivated to establish and maintain a positive social identity through the processes of social categorisation and inter-group comparison (Tajfel and Turner, 1979; Hogg and Terry, 2000a).

Burke (1991) defines identity as 'a sense of meanings applied to the self in a social role or situation defining what it means to be who one is' (as cited in Stokes, 2006, p.128). Jenkins (1996, p.8) points out that there are two ways in which the word 'identity' can be explained. The first conceptualises *identity* as 'absolute sameness which means identical'; and the second explains *identity* as 'distinctiveness which presumes consistency or continuity over time'. In short, identity involves a degree of comparison between individuals. Further, Jenkins points out that identity is therefore not 'just there' but needs to be established through the processes of classification that embrace not only things, but also persons and associations of oneself with someone else (Jenkins, 1996, pp.3-4).

The above definitions imply that 'people are integral social entities that are embedded in one (or more) larger social system(s), whether in the abstract or concrete form, with



reference to ourselves or others [...] it seems that we cannot do without some concepts with which to think about social identity, with which to query and confirm who we are and who others are' (Jenkins 1996, p.6). Indeed, individuals' identity is often influenced by the social world, and social identity often enables them to define who they are and how they relate to other people as well as to the world in which they live. In teams, social identity is therefore the ways in which individuals see themselves as team members (Abrams and Hogg, 1990). Stets and Burke (2000) hold that social identity also includes team-based identity or collective identity. They note that the way in which employees perceive themselves as part of their team is dependent on the integration of their personal identity with team-based identity. Identification with a group, as Haslam describes, is the 'extent to which the group is valued and self-involving and contributed to an enduring sense of self' (Haslam, 2004, p.36).

Personal identity is different from group-based identity. As Stets and Burke (2000, p.228) describe, personal identity represents the categorisation of self - 'unique entity and distinct from others and may act in terms of their personal goals rather than the goals of the group which they belong to'. Conversely, group-based identity is seen as 'encompassing salient group classification', whereby members may perceive the fate of their group as their own (Ashforth and Mael, 1989, p.21). As a result, team members may act in accordance with the group norms. These different sources of identity can be further explored through the interpersonal and inter-group extreme of continuum proposed by SIT.

The social behaviour discussed in SIT can be described as a continuum between the poles of interpersonal behaviour and inter-group behaviour (Turner, 1982). As Hewstone and Greenland (2000, p.138) suggest, members' interpersonal behaviour is concerned with the associations that are established between two persons, and that are influenced by their interpersonal characteristics. On the other hand, inter-group behaviour refers to interactions that are characterised by individuals' memberships in a particular social group. When two persons interact, traits of the persons such as their appearance, personality, and skills may influence their identification<sup>3</sup> with one another, which in turn influence their interpersonal behaviour. For example, 'I get on well with Sarah because she is friendly and

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<sup>3</sup> Identification refers to the process of identifying the self and others, either through lack of awareness of difference or separation, or as a result of perceived similarities (Hall, 1996:16)

hardworking'. On the other hand, members' inter-group behaviours can be established when their self-conception is based on characteristics of the group that distinguish their own group from others. According to Abrams and Hogg (1990), when team members' social identity is more dominant than their personal identity, individuals' perception of themselves as group members impact on their social or collective behaviours within the group, not the interpersonal relationships that they had developed with other individual members within the group (Abrams and Hogg, 1990). For example, 'I am a supporter of the Malaysian football team because I am a Malaysian and I can see myself as being part of the team'.

As Hewstone and Greendland (2000) note, inter-group behaviours display three distinctive characteristics. The first is the existence of two identifiable social categories or social groups from which social identity can be derived. *Social groups* refer to a number of 'individuals who hold a common social identification or view themselves as members of the same social category' (Stets and Burke, 2000, p.225). The second is that there is 'little variability of behaviour or attitude within each group'; and the third is that all out-group members are often perceived as similar (Hewstone and Greendland, 2000, p.138). In general, theories of social identity are concerned with social situations that fall towards the inter-group end of the continuum such as when the social identity of an individual is more important to him or her than his or her personal identity. In such a situation, the person concerned can be described as 'being at one with a certain group, being like others in the group and seeing things from the group perspectives' (Stets and Burke, 2000, p.226; Hogg and Abrams, 1988). So in order to understand inter-group conflict, it is necessary to analyse the way in which social identity is formed and how it is expressed within a group, as well as the ways it influences members' perceptions of other members as well as their social behaviours. In addition, the group needs to be viewed as a whole and analysed as one unit.

### **3.4 The Process of Identification: Cognitive and Motivational Background of Social Identity Theory**

Social Identity Theory (SIT) provides a theoretical framework that explains inter-group differentiation and in-group favouritism from a social psychological perspective (Haslam, 2004). Haslam (2004) notes that an important contribution of the minimal group studies is

that when a person categorises him or herself as a member of a social group, such categorisation gives their behaviour within the group a distinct meaning. He further notes that categorisation of self or oneself into a particular group requires the establishment of a distinct and positively valued social identity.

There are three social-psychological processes explaining the process of how individuals define themselves, namely, 'social categorisation, social comparison and social identification'. These processes are captured under the cognitive and motivational framework of SIT (Ellemers et al., 2003, p.6). In other word, the process of identification involves members who derive their positive social identities from their group memberships and such identities are sustained through inter-group comparisons made by members of one group with another group in order to improve their own positive self-esteem.

The cognitive perspective of Social Identity Theory (SIT) is basically concerned with the cognitive mechanism underpinning members' identification processes and their social behaviour. Haslam (2004) claims that the cognitive paradigm seeks to understand people's psychological make-up and to analyse how individuals' perceptions of their social environment determine their reaction to it. In general, people's cognition refers to their memory, the ability to make judgements, ability to attend to and process specific information, and the way in which they perceive the world around them. Under SIT, the cognitive perspective mainly refers to the psychological processes of self. Self-categorisation Theory (SCT) which has a broader cognitive agenda than SIT (Haslam, 2004, p.29). Turner (1985) argues that 'SCT makes social identity the social-cognitive basis of group behaviour' (as cited in Hogg and McGarty, 1990, p.12). SCT highlights the process of de-personalisation as the central cognitive process whereby the group member is, 'perceptually and behaviourally depersonalised in terms of in-group prototype' (Hogg 1993, p.93).

### **3.4.1 Self-categorisation Theory**

From the perspective of cognitive psychologists, individuals are believed to categorise themselves and those around them into in-groups and out-groups. The former are created when individuals are grouped together based on shared social attributes, while out-groups

are created based on the differences which people identify between themselves and others. This categorisation process leads to social comparisons which lead in turn to inter-group discrimination (Worchel et al. 1998, pp.4-7). As Hogg (2006, p.112) suggests, SIT was developed as a way for researchers to investigate 'how categorisation causes people to perceptually accentuate similarities among stimuli within the same category and differences between stimuli from different categories' (see also Tajfel, 1959). Hence, the fundamental cognitive mechanisms underlying social identity and group processes are based on the process of social categorisation.

Evolving from Tajfel and Turner's (1979) classic ideas on social identity, the process of categorisation was then explored more fully by Turner (1982) in SCT (Hogg and Terry, 2000a). According to SCT, social groups or categories are classified into discrete in-group and out-group categories. Individuals 'classify objects as functionally interchangeable and develop concepts that distinguish members of one category from those of another as a fundamental tool for negotiating the physical and social environment' (Ashmore et al., 2001, p.20). Demographic characteristics such as nationality, gender and age may be used as the basis for intra-group identification (Jehn et al, 1999). An individual's social identity is derived from the social category or group to which that individual belongs (Hogg and Abrams, 1988). These categories or groups serve as the basis for identity which members use to define themselves or to achieve a more positive sense of identity.

The self-categorisation process involves the 'categorisation of social stimuli which best "fits" the stimuli domain i.e. the best accounts for relevant similarities and differences among people' (Abrams and Hogg, 1990, p.196). Such a process helps to classify social perception and give meaning to social stimuli - during the process of self categorisation, intra-category differences become insignificant whereas inter-category differences become more important which results in the creation of stereotypes between groups (Abrams and Hogg, 1990, p.196).

The collective behaviours found within groups are often influenced by stereotypes that arise from intra-group homogeneity. Perkins (1979, p.141) suggests that stereotypes are 'prototypes of shared cultural meanings'. The word 'shared' involves a process of social influence which often leads to individuals conforming to group norms (Hogg and Abrams,

1988). SIT links stereotyping to an individual's sense of group belonging or social identity, through the processes of self categorisation. As suggested by Tajfel (1982, p.27), 'the cognitive output of a functioning social identification is, in a nutshell, stereotypic perception'. In other words, the thought processes of social identification such as self-categorisation often result in stereotyping whereby members of one group perceive their group mates as being more similar to one another than to members of other groups (Tajfel, 1969, Tajfel and Turner, 1979). The out-group members are viewed as being similar to one another and as all possessing the same characteristics. Tajfel (1982) notes that perceptions of intra-group similarity are usually based on several dimensions of categorisation, in particular personality traits, attitudes, behaviour, emotional reactions, and physical appearance.

The process of self-categorisation involves processes of depersonalisation and self-stereotyping whereby individuals depersonalise their perception and stereotype in that they are similar to their group mates and different from those in other groups (Haslam, 2004, p.30). Self-categorisation will then lead to differentiation which involves social comparison between the group to which a member belongs (in-group) and all other groups (out-groups). At this stage, social identification takes place when an individual's identity influences his or her perception of, and response to, a social situation (Hogg and Terry, 2000a).

Social categorisation, differentiation, and social comparison involve the perception of a certain degree of similarity and differentiation between two groups (Tajfel, 1978). Indeed, it is a group's distinctiveness that distinguishes it from all others and allows the members of the said group to feel more positive about their own social identities. If in-group distinctiveness is undermined, then inter-group similarity tends to be perceived as a threat to group identity. When this happens, a group generally acts to protect itself from appearing too similar to other groups. They do this by constantly denigrating or disapproving of the members of the out-group (Brown, 1984; Jetten, et al., 1998; Diehl, 1989).

Overall, the idea of SIT varies from the similarity-attraction paradigm that stresses that 'individuals are attracted to one another on the basis of similarity in opinions, abilities and emotional stage' (Byrne, et al., 1966, p.220). In Byrne's (1971) study, attitude similarity was found to lead to interpersonal attraction. Likewise, Tsui and O'Reilly (1989) found that

similarity of attitudes as well as other aspects such as enjoying similar hobbies were predictors of friendship and thus illustrate an increased attraction between two people (see also Werner and Parmelee, 1979). Tsui and O'Reilly (1989) note that providing group members with shared activities is a vital step for encouraging them to build friendships with one another. Other studies (e.g. Rosenbaum, 1986) have noticed that differences between groups can actually have a negative impact on people's emotions and actions, as when denigrating and disapproving of members of the out-group turns into actual dislike.

Further experiments were conducted by Brown (1978) in order to explain the contrasting view proposed by SIT that similarity does not necessarily result in attraction. In Brown's (1978) study, it was found that some highly skilled industrial workers prevented their wages from being the same as other workgroups, sometimes at the expense of their own absolute wage levels. The findings revealed two different situations whereby social context became the determining factor for understanding how people behaved. In situations that are marked by cooperation rather than conflict, when the status of a group is stable, then similarity between groups and members does, in fact, lead to attraction. Conversely, in contexts that are more competitive, in which the distinctiveness of a group and its members are threatened, the similarity between groups tends to lead to dislike.

In addition, members' perception of the inter-group similarities and differences has led to different interpretations of group phenomena, one of which is from a more subjective and motivational perspective. Subjectivity refers to an 'individual's sense of self and it involves thoughts and emotions which constitute one's sense of "who we are" and the feelings which are brought to different positions within culture' (Woodward, 1997, p.39). As Van Knippenberg and Ellemers (1990) also note, SIT takes a different view of the similarity-attraction paradigm, stating that increased out-group similarity will decrease out-group attraction but enhance in-group bias. Positive social identity can be established through the creation of a positively valued distinctiveness of the in-group from a relevant out-group. An increase in similarity with an out-group may lead to members of the in-group feeling threatened and, as a result, they would make an effort to create a clear, positive distinction between themselves and others (Van Knippenberg and Ellemers 1990, p.143).

SIT proposes that it is the need of group members to enhance their self-esteem that acts as the catalyst for inter-group comparisons and for the development of in-group biases (Abrams and Hogg 1988; Tajfel and Turner 1979). After individuals group themselves with a particular social category, they then seek to improve their self-esteem by differentiating their own group positively in relation to other groups. In other words, people seek to see themselves 'us' as different from and better than other people, 'them', in order to satisfy themselves that they are distinct (Haslam, 2001, pp.31-32). Overall, the basic elements of SIT (social categorisation, social comparison, social identification, the motivation to improve self-esteem) play an important role in explaining inter-group conflict. Mere social categorisation of group members (i.e. psychologically) is sufficient to generate inter-group bias, prejudice, stereotype and discrimination that may subsequently lead to conflicting relationships with the out-group members (Brown et al., 1986; Haslam, 2001).

### **3.5 Contributions of Social Identity Theory in Inter-group Relations**

Alexander and Levin (1998, p.630) note that there had been developments of Social Identity Theory (SIT) and Self-categorisation Theory (SCT), over the last two decades which are designed to improve understanding of the cognitive and motivational factors that drive inter-group conflict, in-group favouritism and inter-group discrimination.

SIT argues that members can opt for self-enhancement strategies to increase their self-esteem (Ellemers 1993). SIT explains the ways in which group members react when they perceive their status to be inferior or when their membership in a group damages their self-esteem. Members are able to improve the status of their social identity by engaging in social mobility, depending on how permeable or impermeable group boundaries are (Tajfel, 1978). Group members can opt to embrace social mobility. Those members in a low status group can change their group membership and move to a higher status group in order to improve their self-image. This is possible when identity boundaries are permeable and there are no other obstacles in the way of such a move (Terry and O'Brien, 2001). Alternatively, if it is not feasible to transfer to another group, members may choose the other two collective strategies, namely social competition and social creativity.

The social competition strategy is consistent with the use of direct tactics to change the disapproved status or position of the group (Terry and O'Brien, 2001, p.273). This strategy involves a proactive approach to improving a group's social standing. One example of this would be the use of industrial action to change the structure of social status in the workplace. This strategy often involves petition or direct industrial action. As Hallier and Forbes (2005) note, the social competition strategy may apply to many work situations. Their results show that this strategy may result in open hostility, active non-compliance, and open defiance on the part of parties involved in the conflict. These actions often demonstrate the integrity of members' allegiance to their low status group (see also Ashforth and Kreiner, 1999).

The social creativity strategy, on the other hand, refers to cognitive responses that involve making inter-group comparisons which favour the in-group with the intention of reframing the in-group in a more positive light (Terry, 2003, p.28). For example, group members may alter the dimensions of social comparison so that the evaluation of their present group will be positive. In work organisations, this proposition of SIT may explain many collective actions such as trade union membership, which emphasise the advantages to and the causes of the in-group (Thompson and Marks, 2007).

As demonstrated in Ashforth and Kreiner's (1999) research, people involved in 'dirty work' recast this work as positive. For example, the work of funeral directors has been reinterpreted. Instead of dealing with dead bodies, it is a job intended to 'help relatives and friends of the deceased deal with grief, rather than processing dead bodies and profiting from their work' (Ashforth and Kreiner, 1999, p.421). Likewise, in Elsbach and Kramer's (1996) research conducted in eight 'top-20' business schools, they investigated how professors respond to events that threaten their perceptions of their organisation's identity. Their work shows that when these perceptions were threatened, the professors focused on their membership in categories that would give them favourable identity dimensions. The results show that, the professors re-positioned their school as being the best among all in the sub-groups (in this case the sub-groups involved are public universities) even though the school may have ranked low when compared with universities nationally.



This finding is corroborated by Hallier and Forbes's (2005) study (p.61) on doctors' experiences of clinical management. They found that one of the ways that doctors protect a newly acquired social identification as managers was to rebuild their current role problems. They reframe their perception of their importance within the organisation so that any unpleasant features of their new position seem acceptable. As a result, the frustrations they experienced were off-set by their belief that it would take time to achieve their goals in clinical management (Hallier and Forbes, 2005, p.61).

Clearly, these self-enhancement strategies impact on inter-group conflict and members' inter-group behaviour. In Brown's (2000) discussion of the application and contribution of SIT to social psychological understandings of inter-group relations, he claimed that the assumptions of SIT have been adopted widely and used to make sense of various inter-group phenomena, in particular in the areas of in-group favouritism, inequality of group status, and the changing of the inter-group attitudes (Brown, 2000, p.747).

In-group favouritism has a profound impact on collective behaviour. According to Dovidio et al. (1997), people tend to be more helpful towards in-group members as opposed to out-group members. SIT provides a theoretical foundation for explaining in-group favouritism. Indeed, from the minimal group studies, three main influences on inter-group differentiation and in-group favouritism were identified (Tajfel and Turner, 1979, p.41). The first concerns the extent to which members identify with an in-group, and incorporate that group membership into their self-conception. The second concerns the extent to which the dominant social context permits inter-group comparisons. The third concerns the extent to which out-groups are considered to be important (Haslam 2004, p.21; Brown, 2000). In other words, SIT proposes that people tend to compare their in-group with out-groups in order to feel good about their own group. In-group favouritism is associated with social categorisation processes which distinguish the in-group (us) from the out-group (them). Such processes subsequently generate in-group favouritism as well as rivalry between the groups (Tajfel and Turner, 1979; Turner et al, 1987). As Tajfel and Turner (1986) claim, in-group favouritism is the only route whereby members can generate positive inter-group comparisons in the minimal group situation (and thereby obtain a positive and meaning social identity) (as cited in Scheepers et al, 2006, p.8).

Scheepers et al. (2006) note that this proposition was criticised by researchers who opted for an interdependence perspective on the minimal group paradigm (e.g. Gaertner and Insko, 2000; Rabbie, 1993). For instance, Scheepers et al. (2006) argue that interdependence within a group is the result of members trying to satisfy their personal material goals so that in-group biases can be accounted for by a need of people to achieve personal goals. Members trust that they can work together and they prefer to work with one another in order to achieve their own goals. Brown's (2000) observations are consistent with Scheepers et al.'s (2006) argument. Brown (2000) noticed that although SIT claims that the tendency of in-group favouritism is based on the absence of objective or instrumental causes, there are situations in which two functions can exist at the same time. For instance, research conducted by Struch and Schwartz (1989) has shown that, at times, social identity processes may interrelate with, as well as serve as an addition to the instrumental motivations. From their studies, it was found that perceived conflict was associated with out-group aggression and that this association was more important for those who identified more strongly with their in-group. Thus, in-group identification is a powerful predictor of inter-group attitude (Brown, 2000, pp.747-748).

In the past, SIT analysis of inter-group inequality has received some support from studies conducted by a number of researchers (e.g. Bettencourt et al., 2001; Mullen et al., 1992; Simon and Brown, 1987). These studies demonstrated that members of minority groups tended to value the unique qualities of their group and to identify with it more strongly than members of majority groups. The reason they gave for this is that the self-esteem of individuals in minority groups was under greater threat than that of individuals in majority groups. Thus, minority group members sought to reduce uncertainty. As a consequence, members of minority groups tended to react more negatively when faced with any sort of re-categorisation of their group (Dovidio et al., 2007, p.304).

Thus far, much of the work inspired by SIT has been focused on in-group bias, which is the more negative aspect of inter-group relations (Brown, 1996). However, SIT has also provided a stepping stone for the development of strategies for improving inter-group attitudes that were inspired by SIT. Examples include the de-categorisation model that was developed by Brewer and Miller (1984) and the common in-group identity model that was

developed by Dovidio et al. (1998); and Gaertner et al. (1993). These models were designed with an attempt to reduce inter-group bias.

Brewer and Miller's (1984, p.288) de-categorisation model suggests that one solution for reducing inter-group differentiation involves 'attending to information that replaces category identity as the most useful basis for classifying each other'. By focusing on the discovery or creation of new categories that cut across old divisions, the inter-group situation would be changed and made more personal. Indeed, Brown (2000) notes that several studies (e.g. Bettencourt et al., 1997) have confirmed the positive role that personal contact has in reducing in-group bias. Group members who are concerned with interpersonal relationships and who have more face-to-face contact tend to demonstrate less in-group favouritism than those members who do not. This makes the occurrence of inter-group conflict less likely (Brown, 2000, pp.724-725).

The second model, which is called the 'common in-group identity model', proposes an alternative approach, i.e. re-categorisation to reduce inter-group bias (Gaertner et al., 1993). Re-categorisation aims to increase positive attitudes towards out-group members through the creation of stereotypes that rely on a common in-group identity. This approach tends to merge two groups which become one group by emphasising the existing common, super-ordinate group memberships. As Gaertner et al. (1993, p.6) note, a new category or other factors (e.g. shared tasks, goals and fate) that are shared by members can be introduced and used as the revised common in-group identity. This approach is used to reduce inter-group discrimination and is another contribution of SIT which improves members' inter-group attitudes.

As described in the previous section, stereotypes also influence the formation of identity by way of Self-categorisation processes that unify people with similar characteristics and convince them that they form a distinctive group. It is important that the characteristics that members have in common are positive and thus reflect well on their sense of self (Hogg and Abrams, 1988: 74-75). In teams, such stereotypes may encourage members to have a higher regard for their team as a whole and to work together.

In general, the contributions of SIT to social psychology are useful for explaining inter-group relations. SIT's contributions to social psychology also set challenging and interesting research questions in many other disciplines. They are especially valuable to research on organisational behaviour.

### **3.6 Contributions of Social Identity Theory to Organisational Research**

Organisations consist of groups of people who work together. Statt (1994) highlights three core characteristics of an organisation – it is a group with a social identity; it is characterised by co-ordination; and its purpose is to achieve a goal. Hence, organisations are more generally seen as ‘any internally differentiated and purposeful social group that has a psychological impact on its members’ (Haslam, 2004:3). Therefore, from the social psychological perspective, Social Identity Theory (SIT) is a suitable concept to use in analysing organisational and management issues in the work place. This is because SIT explains the rationale behind employees’ social behaviour within an organisation. The theory explains impacts of social identity on behaviour and relates them to relevant in-group prototypes. By doing so, SIT is able to explain inter-group relations and many social phenomena that underlie cohesion and relationships among members of groups or teams, for example, social stereotyping, group cohesion, co-operation, and members’ collective behaviour (Hogg, 1993, p.90).

Research on identity has a lengthy pedigree in organisation studies and has become increasingly important because it has ‘yielded a wealth of insights on how individuals define and locate themselves within the organisational context’ (Sluss and Ashforth, 2007, p.9). The general acceptance and deployment of identity have led to more and more interest shown in issues centred on identity, both at the individual and the group level (Brown, 2001). As Albert et al. (2000, p.14) describe, ‘the beauty of the identity and identification concepts is that they provide a way of accounting for the agency of human action within an organisational framework’.

Organisational identification manifests itself at the organisational, the departmental, and the team level (Rink and Ellemers, 2007). Organisations and their sub-groups can become sources of employees’ identification (Ashforth and Mael, 1989; Dutton et al., 1994). Over

the years, much of the research on identity in the workplace has focused on organisational identity as a basis for employee identification with the organisation (Dutton et al., 1994). Employees who identify themselves with their organisation tend to bring benefit to the organisation (Benkhoff, 1997). Indeed, organisational identification has been shown to have great impact on employees' collective behaviour, particularly on their in-group behaviour and their performance at work (see Dutton et al., 1994; Haslam et al., 2005; Lee, 1971; O'Reilly and Chatman, 1986; Pratt and Foreman, 2000; Whetten et al., 1992).

### **3.6.1 Identification, Employees' Behaviour and Performance in Organisations**

In terms of in-group behaviour, the study on extra-role behaviour conducted by Tyler and Blader (2001, p.218) has demonstrated that social identity increases employees' desire to display 'extra-role' behaviour and loyalty. As a result, employees are more willing to conform to the rules and norms within an organisation. Consistent with this, Ashforth et al. (2008) note that in Riketta's (Riketta, 2005) meta-analysis of the organisational identification and affective organisational commitment literatures, it is suggested that organisational identification has a relatively high correlation with job involvement, as well as 'in-role' and 'extra-role' performance (Ashforth et al., 2008, p.337).

According to Dutton et al. (1994), cohesion resulting from a strong sense of identity among employees is likely to increase their cooperation with one another. With a strong sense of identity, employees may be more willing to act in line with the organisation's norms and be more cooperative (Mael and Ashforth 1992; Haslam, 2001).

Lee's (1971) study among scientists, found that individuals with strong organisational identification demonstrate more favourable attitudes towards their job, their profession and their organisation as opposed to others who had a weaker organisational identity. The results show that scientists with a strong organisational identity were generally more productive, better motivated, more frequently rewarded and less likely to leave their organisation. Indeed, when there is a strong organisational identification, employees' beliefs about the organisation are likely to become more positive (Ashforth and Mael, 1989). Individuals tend to have positive evaluations of their organisations (Cheney, 1983) and believe that their organisations are producing valuable outcomes (Dutton et al., 1994).

In teams, establishing a strong identity among members is likely to lead to greater conformity of the members to the team's norms and goals (Kramer, 1991). As a result, there tend to be higher degrees of loyalty, trust and concern for other members within the team, and team members tend to promote and uphold the interests of the team as a whole (Brewer and Miller 1996). When team members experience a higher level of sense of unity, motivation, and job satisfaction, there tends to be lower levels of conflict within their team.

Research focused on teams, specifically virtual teams (e.g. Bouas and Arrow, 1996; Brandon and Pratt, 1999; Fiol and O'Connor, 2005; Mortensen and Hinds, 2001; Pratt et al., 2000, Rock et al., 2003; Sivunen, 2006) has also recognised the significance of social identity in this context. Social identity is thought to provide the 'psychological glue' that holds distributed groups together and allows their members to act as a coordinated unit (see DeSanctis and Poole, 1997; Mansour-Cole, 2001; Wiesenfeld et al., 2001). In virtual teams, the reduced availability of visual components and rituals, such as office buildings, fellow colleagues and informal interactions means that organisations may have to rely on intangible components like psychological attachment in order to promote a feeling of closeness in the teams (Raghuram, 1996; Pratt, 2001; Wiesenfeld et al., 2001).

Overall, by providing insights into the phenomenon of inter-group relations and cognitive definitions of group, SIT and SCT have been used to refine the understanding of identity and identification at the organisational level (Hogg, 1992, p.88). Research that uses these theories has been limited to relatively contrived situations. Although SIT researchers have started to pay attention to the organisational contexts of the theory (Hogg and Terry, 2001), work concentrating primarily on social cognitive processes and on inter-group behaviour has narrowed the scope and the relevance of SIT to organisational life (Ashforth and Mael, 1989).

Although there is some evidence for the advantages of identification in virtual teams, the application of Social Identity Theory to understanding virtual teamwork is underdeveloped (Mansour-Cole, 2001). SIT and SCT need to be specifically applied in this context. With an increasing portion of the economy becoming knowledge-intensive, and with reliance on the ICTs in communication, there is a rise in the diversity of identity in groups which in turn, impacts upon the identity of the companies as a whole. Thus, different organisational

settings, the diversity of teams, the relevancy of SIT and SCT to different contexts is becoming more and more important when looking at identification processes. Diversity leads to changes in the way identification is developed and maintained as it means that teams become more complex and varied (Mannix and Neale, 2005). By using the SIT framework in conceptualising the ways in which identity is constructed, developed and maintained in virtual teams, this research aims to add to SIT research by moving the theory into relevant work settings.

### **3.7 Limitations of Social Identity Theory in Virtual Team Research**

Although there is an increasing recognition of the benefits that understanding social identity has for organisations, theories of social identity have not had much impact on research into the processes and practices of small groups (Postmes et al., 2005). This is because most research has focused on minimal group or large scale inter-group relations instead of interactions between group members. As Abrams and Hogg (1988, p.328) note, the minimal group context does not reveal many of the social motives which may influence the behaviour of real groups, but rather, tends to encourage self-enhancing motive i.e. the motive to increase self-esteem. The evidence for self-esteem as either a basis for or a consequence of minimal inter-group bias is mixed.

While Social Identity Theory (SIT) proposes that self-esteem has a unique motivational role to play, the evidence for this claim is not strong. In studies carried out by Sachdev and Bourhis (1984, p.47), there was no evidence to support the SIT assumption that ‘since minority group membership confers a relatively insecure and negative social identity, minorities should show more discrimination and less fairness than majorities’ (as cited in Abrams and Hogg, 1988, p.321). However, membership of both minority and majority groups result in members showing the same degree of bias towards the out-groups, and neither members of the majority group nor of the minority group were found to have drastically different levels of self-esteem from one another.

Other research has demonstrated that any effect that self-esteem has on inter-group bias is indirect and that it is not the only variable that would cause inter-group bias. For example, group status and power are two important variables to be taken into consideration (Abrams

and Hogg, 1988; Hogg and Abrams, 1990). In fact, recent reviews by scholars such as Thompson and Marks (2007), Postmes et al. (2005), and Reicher (2004) have attributed SIT's over emphasis on self-esteem to its failure to study the relationship between identity and social structure. As Abrams and Hogg (1988) argue, in the highly controlled laboratory situations as existed in the minimal group studies, group members may have had little else to gain but self-esteem. However, in real group settings, self-esteem may be only one of the many motives for inter-group discrimination. As a result, the proposition of self-esteem as a fundamental motive does not provide much insight into the understanding of 'what specific social groups do to achieve positive social identity in a particular social context' (Abrams and Hogg, 1988, p.323).

Reicher (2004) claims that SIT over emphasises in-group membership as the determining factor in creation of social identity. He found that other variables, such as subjectivity of meaning, also shape members' group identity. Likewise, in Postmes et al.'s (2005) interactive model of social identity constructs, they highlighted the influence of other factors on identification in small groups. They looked at the impact of social influence on identification. The model suggests that other variables, such as the ways and times in which interactions between group members take place, are important in the generation of group identity.

Postmes et al.'s (2005) interactive model of social identity proposes that social identity can be developed either from top-down or from bottom-up processes. Top down processes involve employees identifying with other in-group members through group level comparisons between their in-group and other out-groups so that differences between groups are emphasised. On the other hand, developing social identity through bottom-up processes highlights the individuality of members within a group. In this circumstance each member of the group has the power to influence and shape their social identity and group norms. Members may observe and learn from the behaviour of other members of the same group and be encouraged by the common or similar characteristics that they share when identifying themselves within their group. Through direct observation and learning from other members in the same group, it can be argued that social identity is not necessarily derived from inter-group comparisons, but also occurs through interacting with one's own group members. In other words, the perceptions and actions are mainly influenced by



established group norms rather than inter-group comparisons as SIT has proposed (Postmes et al., 2005, pp.8-10).

Further, Postmes et al. (2005, p.6) note that social or group identity provides group members with a 'common ground that defines the group in relation to other groups and is embedded in a common perspective of group history and/or a shared sense of future goals'. Hence, they argue that the nature of social influence is strongly related to the 'content of the identity, i.e. the group's specific norms, get-together, ideology, stereotypes or culture', that members adopt as a basis for identification. The content of identity, according to Postmes et al. (2005), is made up of the emerging property of the group and often relies on different types of social-structural factors including comparative contexts, inputs and communications that occur within the group (Postmes et al. 2005, pp.6-7). Factors such as communication amongst group members were found to play an important role in the formation of group identity. Communication which involves group discussions and the exchange of viewpoints often acts as a vehicle for transforming shared identity from an abstract idea to a concrete reality that people use to accomplish their group goals (Postmes et al., 2005).

Likewise, Reicher (2004) found that there is an imbalance in SIT because it over emphasises the importance of group membership to processes of social identification. In his study the process involved in creation of national identity, Reicher (2004) concluded that other elements, such as meaning, assists people in making sense of their group membership and influence the formation of group identity.

Another fundamental assumption of SIT is to link strength of positive social identification with differentiation - people have a need to achieve and enhance positive self-esteem via the processes of differentiation which include the making of social comparisons between in-groups and out-groups. In other words, the more members identify with their group, the greater the desire for them to gain and maintain their self-esteem, and the more likely these members will be to act in favour of their in-group (Abrams and Hogg, 1988; Hogg and Abrams, 1990).

In studying the relationship between identification and differentiation, Hinkle and Brown's (1990) laboratory experiments on more than thirty different groups revealed that though there are some strong relationship correlations between identification and bias, group identification and in-group bias are not necessarily always positively correlated. This raises important questions regarding the central assumption of SIT that social identities are derived from and maintained by inter-group comparisons.

Condor and Brown (1988) argue that research conducted in laboratory settings is less robust compared to research based on real-life situations. Studies of organisations have failed to demonstrate a consistent positive relationship between identification and evaluative in-group favouritism (Brown et al., 1986; Brown and Williams, 1984). For example, in a study that took place in a hospital, Oaker and Brown (1986) found a significant negative correlation between the strength of identification with the professional group and inter-group differentiation.

In addition, Albert and Whetten (1985) argue that there is variation in members' identification in different types of organisation. In their study, they distinguish between two organisational types – ideographic and holographic. They found that ideographic organisations, which are made up of employees who identify specifically with the subunits in which they work, are more likely to demonstrate the type of behavioural patterns that SIT predicts. This is because members of groups in ideographic organisations tend to create a distinct and positive identity for their own group by comparing their group with other groups. In contrast, employees in holographic organisations tend to create more co-operations and have less inter-group conflict. They argue that feelings of inclusiveness and the presence of strong attachments between employees in their organisation are likely to increase job satisfaction of employees and their performance in teams. Therefore, there is a need to link the unique characteristics of different types of organisations to identification (Albert and Whetten, 1985).

Clearly, the two hypotheses of SIT, i.e. self-esteem as the determinant to identification and identification leads to differentiation, reflect the limitation of SIT in examining the effects of the broader situational context on identification processes, inter-group conflict and members' behaviour in teams and groups. Overall, the theories describing identification

processes and inter-group conflict are rooted in SIT and SCT, and subsequent theoretical developments such as the interactive model of the social identity construct have added to those theories by identifying drivers, conditions and contexts that influence the formation of social identity and inter-group conflict. Generally, social identity can be generated via inter-group comparison. Group members can also play an active role in creating their social identity. In addition, the power of social structure and contextual environment of a group are important for establishing and redefining a group member's social identity.

### **3.8 Implications for the Present Study**

Thus far, this chapter has discussed some of the reasons that Social Identity Theory (SIT) has had an influence on theories about inter-group conflict. SIT has succeeded in finding solutions to some questions about inter-group favouritism, the inequality of group status, stereotypes, intra-group homogeneity and the role of contact in changing attitudes. It has been successful because it provides a theoretical foundation for analysis that is based on motivational and cognitive perspectives (Brown, 2000). However, despite its success as an explanatory tool for inter-group relations, SIT still faces some controversy. As a result, the theory needs to be developed further by applying it within different organisational settings.

The current study examines the internal dynamics of work groups, particularly with regard to virtual teams. As virtual teamwork is being increasingly recognised as having a positive impact on organisational performance, more and more scholars and practitioners have begun to seek theoretical justifications for investing in virtual teams and improving the way they function (see Chapter Two). Recent studies on virtual teams have demonstrated that the way teams manage internal conflict is critical to their success (Shin, 2005, p.331). Specifically, some scholars have suggested that establishing a shared identity in the teams may reduce the tendency to eruption into conflict (Mannix et al., 2002; Montensen and Hinds, 2001).

The aim of the current study is to examine whether high levels of shared identity lead to lower levels of interpersonal conflict in the virtual teams. The research question addressed is 'how do virtual team members' perceptions of their team memberships impact on their behaviours and responses to conflict'?

The way in which members' social identity is formed and thus influences individuals' behaviour cannot be fully understood at the level of the individual (human agency) alone because it is integral to social and cultural processes as well as to the organisational contexts within teams. SIT's failure to fully explore the relationship of identity to social structure is seen in the identification-differentiation hypothesis and the universality of self-esteem as the determinant of identification – the two unresolved areas of SIT that were mentioned earlier. These unresolved theoretical issues reflect the need to fully appreciate the importance of context and social structure when conceptualising the process of identification and conflict in virtual teams.

With these issues in mind, the current study first examines the processes of identification in virtual teams. In particular it explores how and when social identity is established among the virtual team members. It does so by looking at the social contextual processes and the contexts that are involved in influencing individual perceptions and that motivate individuals to work and think as a team within virtual settings. Secondly, it investigates the impact such processes have on members' behaviour at work. The conceptual framework for the present study is more explicitly developed and addressed in the following chapter.

## **CHAPTER FOUR: VIRTUAL TEAMS: AN ANALYSIS OF SOCIAL IDENTIFICATION AND CONFLICT**

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### **4.1 Introduction**

As described in Chapter Two, many organisations are turning to virtual teams to help them meet the demands of the global business environment. However, the diverse nature of such teams and their virtual settings give rise to many challenges in the organisations, one of which is the prevalence of conflict among their scattered team members. The current study proposed that an understanding in the cognitive and emotional processes such as the identification process, which lead to increased feelings of inclusiveness and relationship building, will give an insight into ways to reduce conflict in virtual teams. As the virtual team members tend to rely primarily on perception and psychological ties when representing and relating themselves to their organisation (Raghuram, 1996; Wiesenfeld et al., 1998), strengthening the psychological bonding between the employees and their organisation is necessary in order to support virtual teamwork. Identification is important as it promotes a sense of togetherness (Raghuram, 1996). Social identity facilitates critical organisational functions that pose challenges in a virtual context, such as coordinating employees who are physically dispersed, ensuring that work groups are functioning, and encouraging employees to help each other voluntarily (Wiesenfeld et al., 1998).

There are challenges faced in developing the feelings of inclusiveness or belonging of remote virtual team members to their organisations. As Marks and Lockyer (2005, p.222) note, the geographical dispersion between the employees and their employing organisation reduces the visibility of their organisational membership and also their contact to their organisational structures and processes, both of which influence employees' sense of belonging to the organisation. Because of these changes in terms of focus of identity and organisational loyalty that have come about, identifying the influencing factors and consequences of the identification process is necessary for the management of virtual teamwork (Wiesenfeld et al., 2001).

Much of the extant literature explains the cognitive processes of identification, but fails to look at the behaviours and affective processes that may serve as precedents or as

consequences of that cognition (Schwarz and Watson, 2005, pp.295-296). There is still relatively little empirical research that looks at conflict within virtual teams in terms of identification. The current research thus aims to examine how the impacts of the development of identity influence the emergence and resolution of conflict within virtual teams. It examines how self-enhancement strategies affect members' in-group and conflict handling behaviour in the virtual settings.

Drawing from Social Identity Theory (SIT) and Self-categorisation Theory (SCT), this chapter develops a theoretical framework for understanding employees' identification and conflict within virtual teams. It focuses SIT on inter-group relations, particularly the self-enhancement strategies that impact the formation of identity and the protection of that identity against threats. To do so, it first identifies key issues that are likely to affect how virtual team members categorise and identify themselves in the teams and then, examines how evolving self-enhancement strategies impact the way members' perceive and handle conflict with their teams. As SIT has largely ignored the effects of the broader situational context on identification processes (see Chapter Three), the examination of identification processes needs to incorporate the social and situational context that influences people's perceptions and their behaviour in virtual teams (Fiol and O'Connor, 2005; Haslam, 2004).

After this introduction, this chapter continues by discussing the formation of identity in virtual teams. More specifically, it addresses challenges that prevent team members from identifying themselves in virtual teams. The chapter then looks at the cognitive and motivational source of identification in virtual teams. In particular, it discusses the need for virtual team members to maximise on uncertainty reduction as a primary motivating factor for identification. Such members reduce uncertainty through having agreements and seeking similarity among their colleagues in the same teams. The discussion also includes the impact of potential contextual and situational factors on uncertainty reduction in virtual settings. In explaining the ways in which the development of identity influences the emergence and resolution of conflict within virtual teams, the chapter then focuses on self-enhancement strategies that impact the formation of identity and the protection of that identity against threats when conflict arises. These strategies may provide insights into the ways in which conflicts are handled by the virtual team members. The discussion includes

the influence of socio-variables in virtual settings. Finally, the chapter concludes by stating the implications for the aims of the current study and its seven research questions.

## **4.2 The Formation of Identity in Virtual Teams**

Chapter Three's section 3.7 presents the significance of identity as psychological glue that binds together the dispersed members of virtual teams. Although there is recognition of the significance of promoting identification in virtual teams (Mannix, 2002; Pratt et al., 2000), what remains vague is how identification can be supported and maintained in the context of virtual teams (Wiesenfeld et al., 1998). Similarly, in Fiol and Connor's (2005) review of the formation of identity among the virtual team members, they pointed out that the current research in these contexts is lacking two things - first, an understanding of how identity is generated in the virtual setting; and second, an understanding of how the interplay between individuals, group and social context factors facilitates in the formation of identity within virtual teams.

When studying the formation of identity within teams, Reade (2001) notes that it is crucial to identify the factors that promote identification among the members. Reade's research focuses on the ways in which employee identity is created in the context of the relationship between a global organisation and its local subsidiary. She concludes that one cannot assume that factors which promote identification with one level of the organisation will also promote identification with the other. Likewise, factors which promote identification in a traditional or co-located team may vary from those in a virtual team. For instance, virtual team members are likely to face challenges when they attempt to develop a strong psychological tie to their organisation as they find themselves struggling to overcome isolation owing to the negative influence of the contextual factors in the virtual setting (Hertel et al., 2005).

Past research has suggested that virtual environment engenders a feeling of remote isolation and detachment from the organisations (Ahuja and Galvin, 2003; Chidambaram, 1996; Lipnack and Stamps, 1997). This feeling in turn may create ambiguity in how virtual employees define themselves in relation to both their team and the wider organisation (DeSanctis and Monge, 1999; Wiesenfeld et al., 1998). In virtual teams, members tend to

objectify the virtual others, this often cause unusual hostility and alienation among them (Workman et al., 2003). However, other researchers (e.g. Fiol and O'Connor, 2005; Mortensen and Hinds, 2001) argue that despite the constraints imposed by distance, virtual teams do not experience less team identification than the co-located teams. For instance, Mortensen and Hinds's (2001) study of twenty-four product development teams found that shared identity can be developed in both types of team. They found that in the virtual settings, developing a strong identity among employees is achievable even when these employees are based in different locations.

Clearly, employees' motivation to identify with their teams may vary between different virtual teams and in different industrial sectors. These reviews have indeed shed light on the present research when attempting to understand the reasons why members do or do not identify with virtual teams from the cognitive and motivational perspectives. As identification influences team members' work-related attitudes and behaviours (see Chapter Three), the study also seek insights into the impact of identification processes on members' behaviour within virtual teams.

#### **4.3 Self-categorisation in Virtual Teams: The Cognitive Perspective**

SIT emphasises the cognitive aspect where social identity is based on perception and thought processes whereby actual group membership is not required. Identification occurs when people categorise themselves and others based on the perceptions. Thus, establishing and promoting identity in virtual teams may still be conceivable even though team members face a range of related challenges that result from physical distance from one another such as a lack of socialisation and the reduced availability of visual cues or explicit rituals.

Although in general a weaker reliance is found among the team members who are distributed in different locations, research into the effect of proximity on identification (e.g. Fiol and O'Connor, 2005; Wiesenfeld et al., 2001) has revealed that identity can be developed among these members. Pratt (1998, p.172) argues that the self-categorisation process is 'self-referential' and occurs when one recognises that a collective role is 'deemed similar to one's self'. The categorisations of membership in virtual teams may not



necessarily rely on tangible and visible cues, but rather on the characteristics of the perceiver, the perceived and the social context (Mansour-Cole, 2001). SIT proposes that when individuals identify themselves with a social group, such identification may result in a tendency to conform to group norms and behaviour (Haslam, 2001). However, whether or not that identification with the team has an influence on members' behaviour largely depends on the salience of the team (Fiol, 2002; Fiol and O'Connor, 2005; Tajfel and Turner, 1986) even though individuals can have multiple identities (Tajfel and Turner, 1979).

The salience of categories helps to dictate whether someone is classified as an in-group member (Brewer, 1998). For example, Sarah is a member of a sales team in Company X and she can identify herself with the team or/and with the company as a whole. As Van Dick et al. (2005) note, if in some contexts the team category becomes more salient, Sarah may see herself more in terms of her team membership and conform to the team norms. On the other hand, in the contexts where the organisation as a whole category may become more salient, Sarah may want to follow the organisational norms as she perceives herself more in terms of the organisational membership (Van Dick et al., 2005, p.274). This means that individuals' identity is not fixed and can change according to salience of the category in a particular context at a particular point of time.

Virtual teams can take on a variety of forms, such as teams containing some co-located members and some distributed members (Saunders, 2000). In such cases local sub-group identifications may arise if the virtual team members have a strong sense of belonging to their local colleagues rather than associating with team members at distant sites (Armstrong and Cole, 2002; Kiesler and Cummings, 2002). On the other hand, demographic and cultural diversity in the teams can lead to sub-group identification that hinders coherence by leading to perceptions of otherness. In such cases, social categories such as demographic sub-groups become more salient than identification with the virtual teams as a whole (Thatcher, 2003). As a result, a virtual employee can have many identities, and an employee may or may not identify with his/her virtual team. What is emerging is a new sense of identity as decentred and multiple identities (Amaral and Monteiro, 2002) and advances in information technologies have indeed altered team identity and organisational loyalty (Scott and Fontenot, 1999). Such arguments lead to inquiry into the influence that

virtual settings have on employees' identification. Such enquiry begs questions such as, to what extent do employees identify themselves with virtual teams? Does the diversity found in virtual settings contribute to conflict and variation in identification in the organisation? These inquiries have led to the formation of a research question for the current study.

***Research question 1:*** How do virtual team members categorise and identify themselves in virtual teams?

After investigating whether or not the employees identify with virtual teams, it is crucial to identify the sources of motivation that fosters a conception of self. Rationales for employees' identification or factors that influence identification are further explored. As suggested by SIT and SCT, what makes a particular category salient is the interaction of 'accessibility' and 'fit' within a given context (Van Dick et al., 2005, p.275; Hogg and Terry, 2001, p.7). In terms of analysing virtual teams, this means that virtual team members are likely to categorise themselves in the virtual team when firstly, they perceive that their membership in the team would give them meaning and significance in the social context (accessibility) and secondly, when the expectations of the team are congruent with the stimulus reality (fit) (Turner, 1999). This means that identification in a team is determined by the ways in which meanings and significance of membership in virtual teams line up with members' expectations.

The salient factor of a person's identity changes in accordance with its context and environment (Pratt et al., 2000). In the past, scholars have examined the factors that influence the salience of social categories (e.g. Ashforth and Mael, 1989; Oakes, 1987) to provide insights into how people are classified into a cluster of social categories. There are many factors that influence the salience of social categories. These range from personal factors such as individual motives and goals (Deaux and Major, 1987) to contextual factors, like the characteristics of group task or an organisation structure that includes a reward system (Ashforth and Mael, 1989; Kramer, 1991). While SIT and SCT have provided a conceptual framework for understanding the determinants of the salience of social categories, these theories fail to account for broader contextual situations within which identity is constructed (Ashforth and Humphrey, 1995). Indeed, what is lacking from the empirical research literature on identification in virtual teams is a detailed consideration of

the personal, structural and situational circumstances which engender the process of identification, in particular, the motivational background of members when they identify themselves with a team. In pointing out the importance of contextual influence on the process of identification, Krech et al. (1962, p.308) notes that an 'Individual is born into a social enterprise which is concerned with different positions and roles [...] It is the influence of distinctive social habitats which distinguishes the American from the Frenchman'. Accordingly, the contextual and situational factors cannot be ignored when studying identity issues. Such arguments initiate the need to examine the source of identification in virtual teams from a holistic perspective. Among the issues in need of further study are: What are the possible individual driving factors that foster team members' motivation to identification? To what extent do the virtual settings impact on team members' motivation to identification? What is the role of management in promoting identity in virtual teams?

#### **4.4 The Motivational Sources of Identification**

Ashforth and Mael (1989) suggest a number of factors which are most likely to increase the tendency for identification in organisations. In a team, factors such as distinctiveness of the team's value and practices, prestige of the team and salience of the other team (out-group) are factors that influence identification. There is also a set of factors which is associated with team formation such as similarity, liking, proximity, and shared goals or threat that allow individuals to enhance their self-esteem (Ashforth and Mael, 1989, pp.24-25). Apart from self-enhancement needs, SIT and SCT suggest that people belong to a team in order to reduce uncertainty (Hogg and Terry, 2000a). An ambiguous situation, as defined by Budner (1962, p.30), is a situation in which 'cannot be adequately structured or categorised by an individual because of the lack of sufficient cues'.

Owing to the physical dispersion of the virtual team members as well as the lack of visible cues in communication, virtual team members often face greater uncertainty and ambiguity than those who work in co-located teams (Cramton, 2001). Hence, the desire to reduce uncertainty among virtual team members is greater in comparison to the desire to enhance one's self-esteem via the distinctiveness and prestige of the group. In Fiol and O'Connor's (2005) review of identification in face-to-face, hybrid, and pure virtual teams, they propose

that the desire to reduce uncertainty may be a primary motivating factor that fosters identification within the teams. They argue that the 'low visibility of membership' in virtual teams may limit members' ability to see the teams as worthy and attractive which would in turn, enhance their self-esteem. Hence, virtual workers may have a greater need to minimise subjective uncertainty about their thinking, feelings and behaviours and eventually, their self-image within the virtual context (Fiol and O'Connor's, 2005, p.22). Further, these authors propose that factors such as similarity, proximity and the interaction of members via ICT also influence the salience and stability of social categories (Fiol and O'Connor, 2005, p.22). These factors need to be taken into consideration as they often facilitate members' identification in virtual teams.

Salience of an out-group(s) within a virtual team may have an impact on members' identification in the team. As Ashforth and Mael (1989) suggest, when members seek membership with certain social group(s), 'competition' with members of other social group(s) increases 'out-group salience', and 'the awareness of the out-group reinforces awareness of one's in-group when groups are being compared more sharply, norms and values are underscored, and differences between the two groups are accentuated' (Ashforth and Mael, 1989, p.25). Members in a virtual team may come from different social groups (sub-groups). Salience of one group within the team may facilitate sub-group identification, which in turn leads to inter-group conflict within the virtual team. Members of the opposing group (out-group) within the team, may show stronger in-group favouritism and emphasise their own sub-group's distinctiveness. It is therefore proposed that salience of the out-group within a team may facilitate sub-group identification and contribute to inter-group conflict which in turn, distract or divert members from identifying themselves with others in the same virtual team.

As outlined above, uncertainty reduction is still viewed as a primary motivating factor for virtual employees' identification and one of the ways to reduce uncertainty is through agreement and seeking similarity among their colleagues (Fiol and O'Connor, 2005; Hogg and Terry, 2000a).

#### **4.4.1 Individual's Need: Uncertainty Reduction through Similarity**

As already described in Chapter Three, identification can be seen as a way of establishing and developing an experience of resemblance and connection, thus reducing uncertainty. As Fiol and O'Connor (2005, pp.24-25) suggest, the social groups with which members identify themselves maximise perceived similarities within a group and exaggerate differences between groups. According to SIT and SCT, self-categorisation helps a person to minimise uncertainty by transforming the person's thinking and incorporating the self into a typical group that guides his or her mindset, feelings and actions. This is formed through stereotypes in which members of an in-group are perceived as more similar to each other than they are to members of an out-group (see Chapter Three). This implies that if members feel that they are less similar to other in-group members than they are to those in the out-group(s), they then are less likely to identify with their in-group. The diversity of social groups, culture, and locations (Jehn et al., 1999) may prevent employees from recognising similarity or working to reduce uncertainty.

##### **4.4.1.1 Social Categories and Culture**

Lau and Murnighan (1998) note that diversity in a social category may result in sub-group identification as members may identify with others in the groups who are more similar demographically. Often, differences in social categories cause cultural diversity in virtual teams. Culture delineates appropriate attitudes and behaviours and it can form in any group where individuals have a shared experience of a history of events, for example, in teams, companies, society and nations. This research involves virtual teams from various countries including the United Kingdom (UK), the United States of America (US), Brazil, Singapore and Malaysia. Thus, it is predicted that demographic diversity may result in team members identifying with colleagues from similar cultural backgrounds. As a result, identification is more likely to be at the sub-group level than at the team level.

As described in section 2.5 in Chapter Two, some researchers who have looked at the differences between national cultures in the context of multicultural companies (e.g. Hofstede, 1991; Triandis, 1994) have had their work criticised. However, this work still provides a basis for discussion of national practices, and particularly issues of national

culture. Though this research examines multicultural virtual teams, it does not attempt to determine the influence of a particular national culture on identification. Instead, this study proposes that similarity of national culture may lead to sub-group identification in multicultural virtual teams as well as impacting processes of social incorporation, which in turn influences collective behaviour. As Manstead and Hewstone (1995) argue, people who have similar attitudes, beliefs and values are more likely to bind together and have an easier time interacting with one another. As Chuang et al. (2004) suggest, team members who share similar organisational values tend to agree and support team goals. They also have similar ways of performing tasks and interpreting problems faced, consequently reducing task conflict (Chuang et al., 2004, p.29). Likewise, Jehn et al. (1997) note that having similar ways of seeing and interpreting events may help to mitigate conflict within their teams. On the other hand, team members with dissimilar cultural backgrounds may encounter difficulty in agreeing with one another or adapting to different ways of doing things, thus resulting in the creation of stereotypes about people from other countries as well as distrust (Alexander, 2000; Cascio, 2000; Dash, 2001).

Apart from using demographic factors, people may also categorise themselves under similar job functions or social status at work. Ashforth and Kreiner's (1999) study on employees engaged in 'dirty work' - occupations or jobs that are likely to be perceived as disgusting - suggested that a major component of self-definition is occupational identity, which is the set of central, distinctive, and enduring characteristics that symbolise one's line of work (see also Albert and Whetten, 1985). Using a doctor as an example, for instance, occupational identity reflects issues of what being a doctor means to him or her and learning the knowledge, values and behaviour required for the job is important for this person in order to gain positive self-conception.

Members in virtual teams often come together for a specific need, such as fulfilling specific customer needs, and as such they are generally geared towards learning something, getting a task done, or solving a problem (Chase, 1999; Lipnack and Stamps, 1997). Hence, members' experience in a team may drive them to seek identification with that team. Team goals that provide direction for virtual team members may serve as the most salient glue for identification as a clear goal motivates the members by giving them a heightened sense of urgency and importance (Wegge and Haslam, 2003). While social categories and cultural

diversity may have a negative impact on members' identification, a team whose members share similar functions, interests, and goals may overcome this problem. Deliberately establishing a common goal for the team, as well as communicating to the team members how they can work together towards the common goal, are ways in which an organisation can reduce the likelihood of a virtual team with members from different demographic and cultural background from splitting into subgroups.

#### **4.4.1.2 Location**

When team members work in close proximity to one another, identification is more easily facilitated, because the physical presence of others leads to familiarity and often friendship (Hogg, 2001; Kielsler and Cummings, 2002; Pratt et al., 2000). In virtual settings, physical distance may have a negative impact on identification as reduced face-to-face contact as well as reliance on ICTs to communicate may result in limitation of the number of cues transmitted, which in turn leads to feelings of isolation and detachment among individual employees (Ahuja and Galvin, 2003; Chidambaram 1996; Lipnack and Stamps, 1997). It also decreases the visibility of their membership in the team (Wilson et al., 1994).

However, according to Wiesenfeld et al. (2001, p.216), some theorists (e.g. Baumeister and Leary, 1995; Mael and Ashforth, 1992; Pratt, 1998) have argued that physical distance between members in virtual teams may not affect their identification. The decreased availability of organisational structures and processes means that individuals may rely on other factors in order to promote identity. Such factors may include personal attributes and goals such as individuals' need for self-enhancement, affiliation as well as their attributes of relationship which encompass the need to establish social relationship at the workplace. These attributes may encourage members to be proactive and 'reach out' to other team members (Wiesenfeld et al., 2001) which will promote identity in virtual teams. Along the same line, Fiol and O'Connor (2005, p.23) argue that in pure virtual teams where members have no face-to-face contact, members are likely to reduce uncertainty by projecting their own imagination and perception onto other team members. They tend to presume that their colleagues in the same team hold similar beliefs about their team. Although these attributes are not empirically verifiable, they have positive benefits for the team, as they lead to a more stable categorisation which in turn promotes identification.

Conversely, proximity may result in negative consequences on member's identification with the team when members are engaged in virtual and co-located teams at the same time. Armstrong and Cole (2002) claim that close proximity with the co-located team may lead to sub-group identification because team members are likely to perceive their home group as those they sit beside and have physical interaction at work, and the local elements often promote informal or spontaneous identity. This is also seen in Marks and Lockyer's (2005) study on the effect of geographical distance on identity of the members in software teams. They found that team identification rather than organisational identification tends to be more important for employees who are physically dispersed from their employing organisations. Two reasons were identified for this – first, the close proximity among the team members within sites boosts a strong 'sense of team membership'; and second, dispersion and exclusion from the employing organisation results in a strong desire to identify with 'stable entities' in order to reduce uncertainty (Marks and Lockyer, 2005, p.235).

The effect of diversity on identification is moderated by the visibility of individuating information. Such information is able to simulate the physical proximity of team members and salience of a social category (Rockmann and Northcraft, 2008). In virtual teams, both rich and lean media play an important role in providing visible individuating information such as body language, gestures and facial expression. Indeed, the differential impacts of rich and lean media on identification within virtual teams have been reported by Fiol and O'Connor (2005), Pratt et al. (2000) as well as Rockmann and Northcraft (2008). Pratt et al. (2000) suggest that rich media such as video-conferencing carries rich amounts of information about the social context as well as social cues so it can be used to facilitate communication. However, Fiol and O'Connor (2005) argue that rich media may have a negative impact on identification in virtual teams as their use can reinforce sub-group differences, which in turn lead to sub-group identification. Lean media, on the other hand, restrain the visibility of sub-group differences and are used to create a sense of oneness within virtual teams, particularly within pure virtual teams where there is no physical or face-to-face contact.

In general, the physical dispersion of team members may not influence their identification in virtual teams, but the argument only seems to hold when team members are isolated,



with no face-to-face contact with their colleagues, or when members are not working with virtual and co-located teams at the same time. The extent to which contextual and communication cues are conveyed via the ICTs influences the visibility of membership and the stability of social categories. Other than the need to reduce uncertainty in virtual teams, the need of members to 'belong' motivates identification with their team.

#### **4.4.2 Individual's need: The Need to Belong**

The concept of social identity includes cognitive and motivational factors as well as affective dimensions (Abrams and Hogg, 1998). In the realm of emotion, social identity provides a sense of belongingness to the team (Albert, 1998). In other words, team members have 'a sense of emotional involvement' within the team (Ellemers et al., 1999, p.372). As Hornsey and Jetten (2004, p.249) note, people have a sense of belongingness and this need can be fulfilled through interpersonal relations, as well as through team membership.

The need for affiliation is a personal attribute (Wiesenfeld et al. 2001, p.216) and is expressed through the processes of identification, particularly through a person's team memberships and relationships with others. Markus and Kitayama (1991) suggest that employees who have a higher need for affiliation may display strong organisational identification. In Hinkle et al.'s (1989) study of the multi-component conceptualisation of team identification, they found that emotional factors such as being 'glad to belong to the team' motivate individuals' identification. In the past, research has started to look at the affective component of identity. For instance, Brown et al.'s (1986) study of a medium size paper factory in which there were a number of sub-groups found that interpersonal relations were the most important reason for seeking membership in groups. Similarly, Gurin and Townsend (1986) specify the sense of common fate is one of the three properties of gender identity.

In organisational studies, the sense of having a shared fate is proposed as a pre-requisite for organisational identification (Reade, 2001). In virtual settings, Wiesenfeld et al. (2001) reported a positive relationship between affiliation needs and strength of organisational identification. They suggested that the need of virtual team members to belong promotes

identification, despite physical dispersion and lack of face-to-face contact within the teams. This need was found to lead the members to proactively 'reach out' to the organisation. As a result, it was concluded that perceived work-based social support become an important factor in promoting identification in such teams (Wiesenfeld et al., 2001, p.216).

To sum up, the need for uncertainty reduction and affiliation are perceived as the primary motivational factors for employees concerning their social categorisation and social identification within virtual teams. However, whether these motivational factors are influential depends on the salience and stability of the virtual team as a social category for identification. This is because factors such as diversity in the virtual settings, the contextual and communication cues conveyed via the ICTs, and sub-group identification, may have significant impact on the salience and stability of a virtual team which in turn, causes difficulties in fostering identification.

Apart from recognising the impact which these contextual factors have on identification, identifying the influence of situational factors on identification is also important. As suggested by Krech et al. (1962) in their framework for study of group effectiveness, intervening variables in the organisations influence employees' work behaviour and performance in groups. Knowing that teamwork may form part of a bigger strategic picture of the organisations, understanding of how to support virtual teamwork effectively has become increasingly important for many organisations (Johnson et al., 2002).

#### **4.4.3 Intervening Factor: Support Received from Management**

Recognition of the needs of virtual team members for affiliation and the reduction of uncertainty as motivational factors to identification has called for the need to find out how organisations can support team members in fulfilling these needs. Though past research (e.g. Jarvenpaa et al., 1998; Pratt et al., 2000; Rock et al., 2003; Smidts et al., 2001; Suzuki, 1998; Wiesenfeld et al., 2001) has started to investigate how identification can be promoted in virtual teams, there is little empirical research that examines the facilitators and impediments to the identification processes in the teams. Research on co-located teams has indicated that boundary management and organisational supports influence the effectiveness of teams (Hertel et al., 2005). Likewise, in virtual teams, having sufficient

organisational support and frequent communication within the team is crucial to maintaining coordination and control.

Prior research has emphasised the significance of the perceptual dimension in promoting virtual team identification (see Ashforth and Mael, 1989; Pratt, 1998). Given the geographical distance and lack of social contact between members, virtual teams no longer rely on tangible or visible cues such as building, logo, rituals to promote identification, but instead rely on information to shape their perceptions of others and to reduce uncertainty in the teams (Mansour-Cole, 2001). Hence, it is important to provide substantial information about the team and its members in order to facilitate identification with virtual teams. Over the years, much of the research in virtual teams has focused primarily on issues of identity and communication (e.g. Pratt et al., 2000; Rock et al., 2003; Sproull and Kiesler, 1986, 1991). Such research has found that successful communication amongst virtual workers creates a shared sense of meaning by providing information about the social context and social cues. Indeed, having high quality communication amongst the members results in the experience of social presence and establishes a shared interpretive context, which in turn fosters a common identity.

Shared interpretive context along with the ways in which members perceive one another has an impact on how relationships are built. This is because of the lack of social interaction in virtual teams (Jarvenpaa et al., 1998). Members expect their teams to be places in which they find similarity and these members will often find ways or traits that boost such similarity (Jarvenpaa et al., 1998; Tajfel and Turner, 1986). When virtual team members are geographically dispersed, they depend on their perceptions when developing identity. These perceptions are shaped by using the information that is available to them. As Jarvenpaa et al. (1998) suggest, employees exchange information amongst themselves in order to create a picture of the integrity and abilities of their colleagues. This information, be it personal, like colleagues' background and their experience, or contextual, like what is currently happening at other sites, forms a member's perceptions of others. It also reduces the uncertainty these members face in virtual teams. Furthermore, the exercise of sharing information itself may encourage team building through creating opportunities for social interaction, participation and involvement (Jarvenpaa et al., 1998) which in turn, binds team members together.

In addition to the availability of information for and about virtual team members, strong identification is associated with a member's perception that they are able to communicate adequately with other colleagues (Suzuki, 1998). Again, rich media such as video-conferencing and teleconferencing may serve to reduce feelings of solitude and ambiguity created by the daily use of ICTs. Other members' individuating information and communication cues that are made available may change their perceptions not only of their tasks, but also of their colleagues in the teams. Consequently, these changed perceptions may increase members' commitment to their work and to their virtual teammates (Workman et al., 2003).

Shared group goals and objectives providing direction to team members may serve as virtual teams' most salient glue and their best resource for reducing uncertainty (Wegge and Haslam, 2003). Indeed, clear definition of team goals and how each member can contribute to their achievement may help to reduce ambiguity in defining self within the teams (Locke et al., 1981; Rennecker, 2001). Smidts et al. (2001, pp.1052-1053) examined the impact of communication on organisational identification and found that it was important to convey sufficient information about the organisation's goals as well as employees' roles in order to help an employee to define themselves in the organisation. Thus, the way in which organisations create and convey team goals appears to be influential in the process of identification.

A shared goal not only provides grounds for self-definition, it also establishes a 'super-ordinate category' (Gaertner and Dovidio, 2000, p.20; Brown et al., 1999, p.752) which helps organisations to reduce in-group bias and inter-group conflict that are caused by demographical and cultural diversity. This 'super-ordinate category' helps to change members' perception of boundaries from different social groups into a more inclusive category with which these members can identify themselves. During the process of social comparison, people categorise and identify themselves in groups. However, diversity in social categories and culture may encourage sub-group identification within the virtual teams, thus preventing them from identifying with the team as a whole.

To overcome this problem, adjusting the inter-group social comparative context may be a way to foster identity in virtual teams (Postmes et al., 2005). This can be achieved by

organisations deliberately establishing a common goal and informing their members on how they can contribute to the goal. This is because an agreed-upon team goal gives members a heightened sense of urgency and unity to work as a team in order to achieve the goal (Brown et al., 2000). Clearly, as Postmes et al. (2005, p.10) claim, communicating team goals enables the team members to ‘translate an abstract idea of “being in this together” into a concrete idea of what it is that “we” are doing and striving for [...] it enables a group to develop a situated social identity from some abstract notion of togetherness or from comparisons with relevant out-groups’.

Finally, the degree and nature of social support received at work is examined. Receiving social support is a visible indicator of group membership which boosts members’ self-worth and fulfils their need for affiliation (see Wiesenfeld et al., 2001). Members in co-located teams are able to rely on organisational artefacts, symbols, and rituals to promote identification with their team, whereas in virtual teams, such mechanisms often are not available. Hence, receiving social support at work may encourage identity building in such teams (Weisenfeld et al., 2001). Social support is considered to involve positive social relationships with other employees. Such support is often received from key persons with whom employees have close contact, such as their colleagues and supervisors. This may foster identification because members feel more appreciated and personally important when support is received. This leads them to believe that their contribution to the organisation is self-enhancing and appealing. As suggested by Wiesenfeld et al. (2001, p.225), managers should take the initiative to support virtual team members and to cultivate an atmosphere of sharing and supporting. For example, providing more training for virtual workers, organising more face-to-face meetings, and adopting a more sophisticated technological infrastructure are all mechanisms that an organisation can adopt to support their virtual teams.

In Lim’s (1997) research looking at the effect of work-based support on job dissatisfaction, social support received at work was called ‘work-based support’. Work-based support is ‘the companionship and emotional functions performed by support from supervisor and work colleagues’ (Lim, 1997, p.253). Lim (1997, p.262) concluded that ‘work-based support can contribute significantly in buffering against job dissatisfaction and non-compliant job security by inducing in the individuals a sense of belonging and solidarity’.

Other ways to strengthen and improve members' attachment to their teams would be periodically to rotate the dispersed members working in the virtual team with those in the local office and to continue to encourage interaction between team members even after projects are completed (see Marks and Lockyer, 2005). Organisational supports make employees feel that they are important and personally valued.

Taken together, a summary of the discussions on motivational sources of identification in virtual teams is displayed in Figure 1. The discussions in this section result in three research questions for the current study.

***Research question 2:*** What are the possible motivational factors that drive virtual team members to identification in virtual teams?

***Research question 3:*** To what extent do virtual settings impact on virtual team members' motivation to identify with their teams?

***Research question 4:*** What is the role of management in promoting identification in virtual teams?

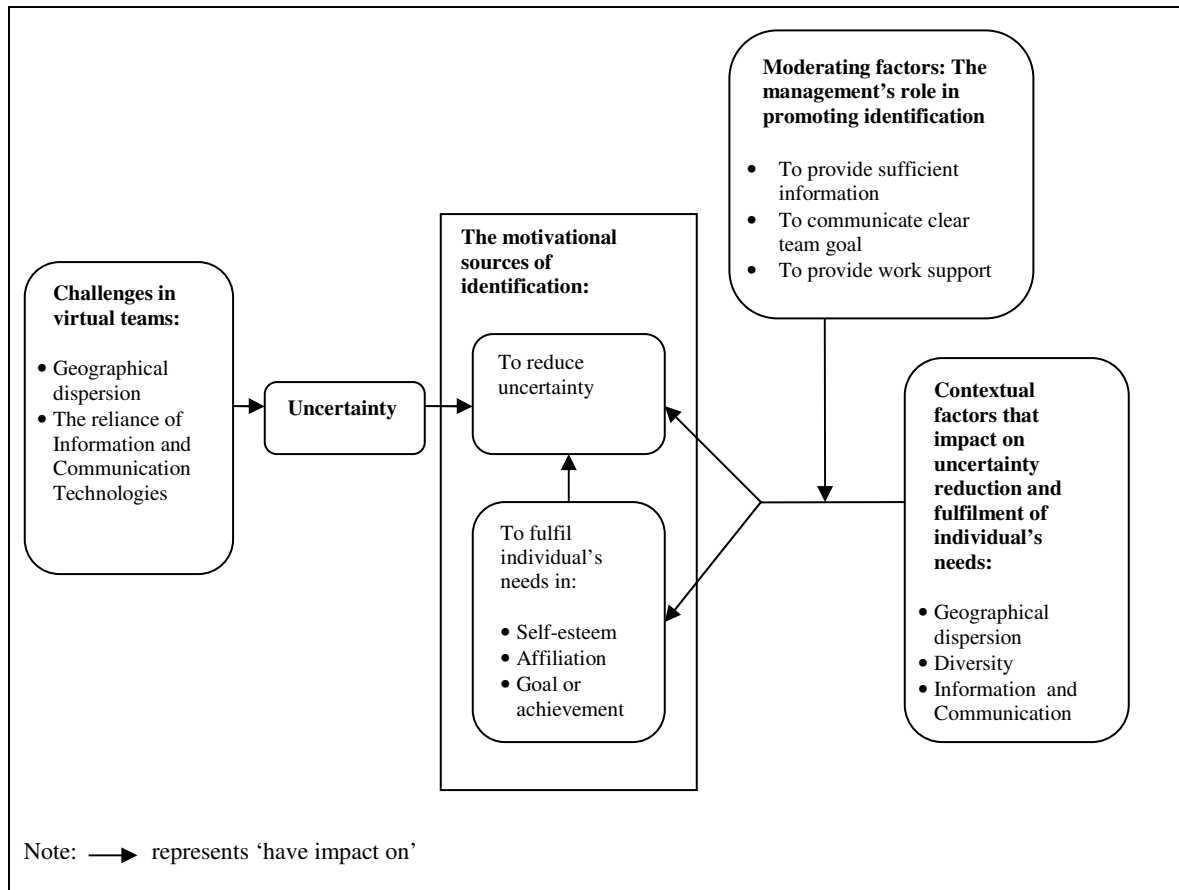


Figure 1: The motivational sources of identification, the contextual factors and management's role in promoting identification in virtual teams

Figure 1 identifies the challenges of virtual teams, and the uncertainties which can arise there from. Reduction of uncertainty and the needs of the individual are seen as motivational sources of positive identification. It then indicates that the fulfilment of individual's needs of self esteem, affiliation, and goal or achievement can contribute towards the reduction of uncertainty. Three moderating factors are then given which a manager can supply in order to promote these needs of identification. These moderating factors also help alleviate aspects of uncertainty and fulfilment of needs which can exist through dispersion, diversity and information and communication.

The virtual team members may have a high level of uncertainty owing to their geographical dispersion and the heavy reliance of ICTs in their daily communication. Their lack of face-to-face meetings and visual communication cues may result in a lack of individuating information about their virtual colleagues. The lack of such information can contribute

towards an increase in feelings of ambiguity of the members towards their virtual environment.

Identification signifies a way of generating similarity and understanding among the team members, which is likely to reduce uncertainty (Fiol & O'Connor, 2005, p.21-22). This study proposes that the need to reduce uncertainty in virtual settings becomes a significant motivational source of identification among virtual team members. In addition, individual's needs such as the need to achieve self-esteem, the need for affiliation and the need for goal or achievement motivate the team members to identify themselves with a team. Also, they tend to regard themselves as part of the virtual team when similarity can be sought among the virtual team members. This may reduce uncertainty as the team members are likely to feel more certain about the in-group normative beliefs, the virtual team itself and its identity as well as their virtual colleagues (Grieve and Hogg, 1999). When the above needs can be fulfilled in a team, the virtual team members may feel good and positive about themselves, and be in a better frame of mind to contribute towards the team's goals and, quite simply, to work harder.

Nevertheless, uncertainty reduction and the fulfilment of virtual team members' needs can be affected by the contextual factors of virtual settings. The geographical distance and diversity of virtual team members, as well as their reliance of ICTs in daily communication, may prevent the members from identifying themselves with their virtual teams. Consequently, organisational support given with the intention of increasing the salience and stability of the virtual team as a social category for identification is crucial. To promote such identification, it is the role of management in supplying sufficient information to virtual teams, creating and communicating a clear team goal, and providing considerable work-based support. These intervening factors are proposed to have a positive moderating effect on the impact of the virtual issues affecting the members' identification within virtual teams.

This chapter moves on to explore the relevance of Social Identity Theory (SIT) and Self-categorisation Theory (SCT) to understand inter-group conflict, especially their usefulness in gaining an understanding of the influence of self-enhancement strategies on the ways in which members handle conflict when it arises.



## 4.5 Identification and Conflict in Virtual Teams

Conflicts in virtual teams may result from discrepancies in team members' expectations of one another within the teams. These discrepancies arise from differences between the method members use to perform their task, as well as the attitude and behaviour with which they approach their work (Bosch-Sijtsema, 2007). As development of trust and loyalty among virtual team members is based on the 'perceived ability, benevolence, and integrity' of team members (Jarvenpaa et al., 1998, p.60), failure to meet those expectations may discourage team members from identifying themselves with each other. The perception of team mates as 'other' may diminish loyalty in teams as members tend not to trust people who have different beliefs or practices from their own (Eckel and Grossman, 2005; Cramton, 2001).

As Hinds and Bailey (2003, p.618) argue, the 'social and psychological effects of distance' are likely to increase conflict within the teams as it is difficult for members to establish a common bond owing to the challenges caused by clashes in perspectives, demographic background, and ways of doing things. Knitting together the discussions in Chapter Two regarding conflict in virtual teams, it is argued that conflict in virtual teams may result from tensions between members concerning task, process, relationship or identity. The current study seeks to identify areas of possible conflict that may arise in virtual teams.

***Research question 5:*** What are the possible conflicts that arise in virtual teams and what factors cause such conflicts?

As described in the previous chapter, SIT holds that there are three strategies that team members will use to gain or improve their social identity when they face identity-based conflict (Hogg and Abrams, 1988; Tajfel and Turner, 1979). In the past, social identity research emphasised the tactics that group members used to improve or enhance their social identity (see Hogg and Terry, 2001). However, there has been little analysis done of the efficacy of these strategies (Hallier and Forbes, 2005; Schwarz and Watson, 2005) and the psychological processes of employees when choosing such strategies (Hallier and Forbes, 2005). Taking this approach leads to two questions: First - how do virtual team members

who face identity threats respond and react to these threats? Second - how do the self-enhancement strategies used reduce the uncertainty and conflict prevalent in virtual teams?

Dalton and Chrobot-Mason (2007) note that conflict within virtual teams results in the rise of positive biases towards one's own group. When one's group is threatened, positive biases can develop into dislike and even hate towards members of other groups. Under threatening conditions, low status group members may relate better within their own group in order to reduce uncertainty and thus to survive, and to be different from the other groups even if doing so does not enhance an individual's social status or self-esteem (Dalton and Chrobot-Mason, 2007, p.171). Dalton and Chrobot-Mason (2007) also propose that inter-group conflict may lead to the avoidance of inter-group interactions and seeking information to confirm their existing stereotypes and suspicions about the out-group. These effects of inter-group conflict may increase the likelihood of identity tension (see Stephan and Stephan, 1985), because a positive social identity allows members to establish a positive psychological distinctiveness for their own group or team. In other words, the in-group members will be perceived as typical of their group to the extent that they are similar to their colleagues within their group and different from those of the out-group. As a consequence, members of the in-group typically show more in-group favouritism and out-group discrimination, which in turn may lead to inter-group conflict (Haslam, 2001; Tajfel and Turner, 1979).

In general, conflicts in virtual teams not only bring negative consequences to the relationships among the members, but also inter-group anxiety may increase the likelihood of identity-based conflict in which members feel that their self-esteem is being threatened.

When members' self-esteem is negatively affected, SIT proposes that members adopt three strategies to improve their social identity. These strategies include individual mobility, social creativity and social competition (Hogg and Abrams, 1988; Tajfel and Turner, 1979). There are various social-structural factors that influence a member's choice of coping strategies. These factors include the relative status position of one's group, the permeability of inter-group boundaries, and the legitimacy of personal status or group status (Ellemers, 1993, p.27). Likewise, the current study proposes that when analysing virtual teams in these terms, one can see that virtual team members' approaches towards conflict and towards out-

groups is dependent on their perceptions of their status, the legitimacy of their social position, the opportunity for transferring their membership to another group and the level of threat they perceive to their in-group from the out-group.

Past research on conflict handling behaviour in work teams has identified both the personality attributes of members and the conflict situation as factors that affecting members' choice of conflict handling style (Farmer and Roth, 1998, p.675). Although team members' conflict handling behaviour may be seen as 'habitual response and styles', such behaviour can be understood in terms of 'underlying attributes such as motives, needs and value systems which shape behaviour' (Kilman and Thomas, 1978, p.61). In virtual teams, the effects of such attributes on members' conflict handling behaviour may be worth examining because of the diverse composition of the workforce. As Farmer and Roth (1998) suggest, team composition may have an impact on team members' conflict handling behaviour. Virtual team members' conflict handling behaviour may be governed by the unique and diverse contexts present in the virtual setting (Samarah et al., 2002).

The current study proposes that identification process impacts on virtual team members' inter-group and conflict handling behaviour. The ways in which socio-structural variables influence the team members' self-enhancement strategies and their ways of handling conflict are discussed in the following section.

#### **4.6 Self-enhancement Strategies, Inter-group and Conflict Handling Behaviour**

The current study proposes that adopting the strategy of individual mobility to enhance one's self-esteem may influence virtual team members' inter-group and conflict handling behaviour. It is argued that they may disassociate from other team members. They do this when they believe that the distinctiveness and prestige of the original or present team is no longer useful for enhancing their self-esteem or for creating positive social identity. In this case, virtual team members may decide to pursue personal goals and attempt to improve their social position by transferring their membership to another team. As team members prepare to transfer out of their current team and seek membership in a higher status team, they may not make an effort to improve interpersonal relationships within the group they

are leaving. Whether or not they are successful will depend on the permeability of inter-group boundaries.

Virtual teams have varying life-spans - some are temporary, others permanent or ongoing (Saunders and Ahuja, 2006). The tenure and structure of a virtual team is often influenced by factors which include the terms and complexity of its assigned task, and the amount of time available to solve the problem (Earley and Mosakowski, 2000). Hence, the nature of the task is linked to its complexity which in turn, is often measured by the amount of time needed to complete it.

Research that studies variation in the form that teams take often distinguishes between temporary and ongoing teams, based on the perceived life span of the task assigned to them (Bell and Kozlowski, 2002; Saunders and Ahuja, 2006). Ongoing teams are described as work units organised around well-defined, interdependent functions. An example of this would be a human resource department. Another example would be functional teams (Hellriegel et al., 1998) or work teams (Mankin et al., 1996, Putnam, 1992). Functional teams are typically formed to handle cyclically recurring activities (Putnam, 1992) and as such they are appropriate for long-term tasks. On the other hand, temporary teams are generally formed to accomplish non-routine and highly skilled technical or administrative projects, such as developing a new product or informational system. Examples of temporary teams would be project teams (Mankin et al., 1996; Putnam, 1992), or short-term project teams (Cohen, 1993). Often, temporary distributed teams will disband when a project is completed (Hackman, 1990; Mankin et al., 1996).

Saunders and Ahuja's (2006) framework for understanding virtual teams based on their life span suggests that a team's life span and the projects being handled may have implications for the well-being of virtual teams. A virtual team's well-being is related to 'activities that have to do with development and maintenance of the group as a system' (McGrath, 1991, p.156). As Saunders and Ahuja (2006) point out, with such a broad spectrum of the nature of virtual teams, members may encounter difficulty in finding common ground and this may, in turn, prevent the formation of group identity. As a result, it is then argued that when virtual team members encounter identity threat, members who are engaged in temporary virtual teams may focus on transferring to another group when the project is

completed. Moreover, a virtual team member may work in both virtual and co-located teams simultaneously, or in more than one virtual team at a time, all of which make it highly likely that they will be able to transfer to another team.

#### **4.6.1 Individual Mobility and Conflict Handling Behaviour**

As virtual team members may focus on transferring their team membership to another team, this study proposes that they may also avoid addressing or solving conflicts (also known as avoidance behaviour), rather than dealing collaboratively with conflict. Furthermore, collaborative conflict handling requires the opportunity to interact as well as positive mutual regard (see Chapter Two). Dealing with conflict collaboratively may demand more effort and time from members of a virtual team because distance and ICT often inhibit their coordination and collaboration (Hinds and Bailey, 2003; Kraut et al., 2002).

Alternatively, team members may choose to simply agree with their colleagues in order to avoid conflict. This is known as accommodative behaviour (Hinds and Bailey, 2003). This approach may be adopted because the virtual team will be dissolved once the project reaches an end. Since the main goal of a virtual team is the successful completion of the project rather than socialisation, members may not take time to nurture common understanding and collaboration in the teams (Bell and Kozlowski, 2002).

Past evidence (e.g. Hinds and Bailey, 2003; Montoya-Weiss et al., 2001; Xie et al., 1998) has suggested that both avoidance and accommodation behaviour are detrimental to team performance, as the former manifests as a lack of group participation and failure to respond to others, while the latter results in merely passive involvement in the team task.

#### **4.6.2 Social Creativity, Social Competition and Conflict Handling Behaviour**

Social creativity is adopted as a self-enhancement strategy when group members have no other option but to acknowledge and accept the disapproved status or position of their group. When group membership is fixed, Ross (1977) found that its group status did not influence the extent to which individuals felt they belonged to it (as cited in Ellemers, 1993, p.38). As a result, they would openly accept the low social status of their group, and employ the strategy of social creativity to improve their social identity. In virtual teams,

Fiol (2002) notes that the reason for members not to identify with their team is related to their perception of the stability of the elements that used to define their team.

In virtual settings where there is a strong reliance on the Information and Communication of Technologies (ICTs), Fiol and O'Connor (2005) suggest that the communication cues used to perceive and characterise their teams are still largely dependant on the frequency of face-to-face contact. In other words, if the virtual team members receive communication and visible cues, then they are able to continuously test their beliefs. As a consequence, team categorisation appears to be relatively unstable i.e. changing.

This study proposes that virtual team members engaged in an ongoing virtual team which is facing conflict, and who have a high likelihood of working with the same members in the next project, may find ways to protect their social status or their identity in their teams. The virtual team members can enhance their team image by modifying the meaning assigned to comparative dimensions or selecting a different comparison group (Terry and O'Brien, 2001, p.273; Ashforth and Kreiner, 1999). To achieve this, the members may try to stress their contributions to the team or they may choose a new dimension or a new group for comparison (Terry, 2003, p.28). In a virtual team, it is then argued that members may improve their identity by emphasising their contribution to the whole team. In an attempt to improve their low social status and identity in the team, members may put more effort into solving conflicts within their team in order to cement team relationships, facilitate the accomplishment of the team's assigned tasks, and reinforce the networks of relationships among the members that will enable them to collaborate and work well in the future.

The virtual team members may deal with conflicts through collaboration and compromise. As Montoya-Weiss et al. (2001) suggests, these two behaviours are cooperative, problem-solving approaches to managing team conflict. Thus, they enhance team performance. When conflicts occur, the parties involved may show some joint level of concern for tasks, as they take part in a more open exchange of information, discuss the problem and work purposefully towards a solution (Montoya-Weiss et al., 2001, p.154). This should lead to an improvement in team performance in terms of decision process satisfaction, perceived decision quality, degree of group agreement (Paul et al., 2005, p.209), and relationship building (Hinds and Bailey, 2003).

When virtual team members opt for social competition for status protection, they may try to solve conflict competitively. Competition may arise when one party attempts to force through his or her own solution, resulting in team members often not being able to arrive at an agreement that is beneficial to both parties (Paul et al., 2004). At work, competitive style is believed to be a negative strategy for conflict resolution because it results in team members ignoring or disregarding one another's perspectives. As De Dreu and Beersma (2005, p.107) note, competitive behaviour in handling conflict involves threats, bluffs and persuasive arguments. However, in virtual teams, competitive behaviour may not have such a negative consequence owing to the geographical dispersion of their team members. For instance, the findings of Montoya-Weiss et al.'s (2001) study suggest that sometimes handling conflict in a competitive way can have a positive effect on virtual team performance because members tend not to experience tension or aggressive emotions owing to their geographical dispersion and inevitable limitations in conveying facial and visible cues when using ICTs. Based on the above discussions, two research questions arise:

***Research question 6:*** How do virtual team members react to and deal with conflicts arising in virtual teams?

***Research question 7:*** What are the factors that influence the choice of self-enhancement strategies and how they relate to virtual team members' behaviours associated with conflicts?

Overall, sections 4.5 and 4.6 discuss the relationships of conflict, socio-variables, self-enhancement strategies, team members' inter-group and conflict handling behaviour in virtual teams. A summary of the discussions is displayed in Figure 2.

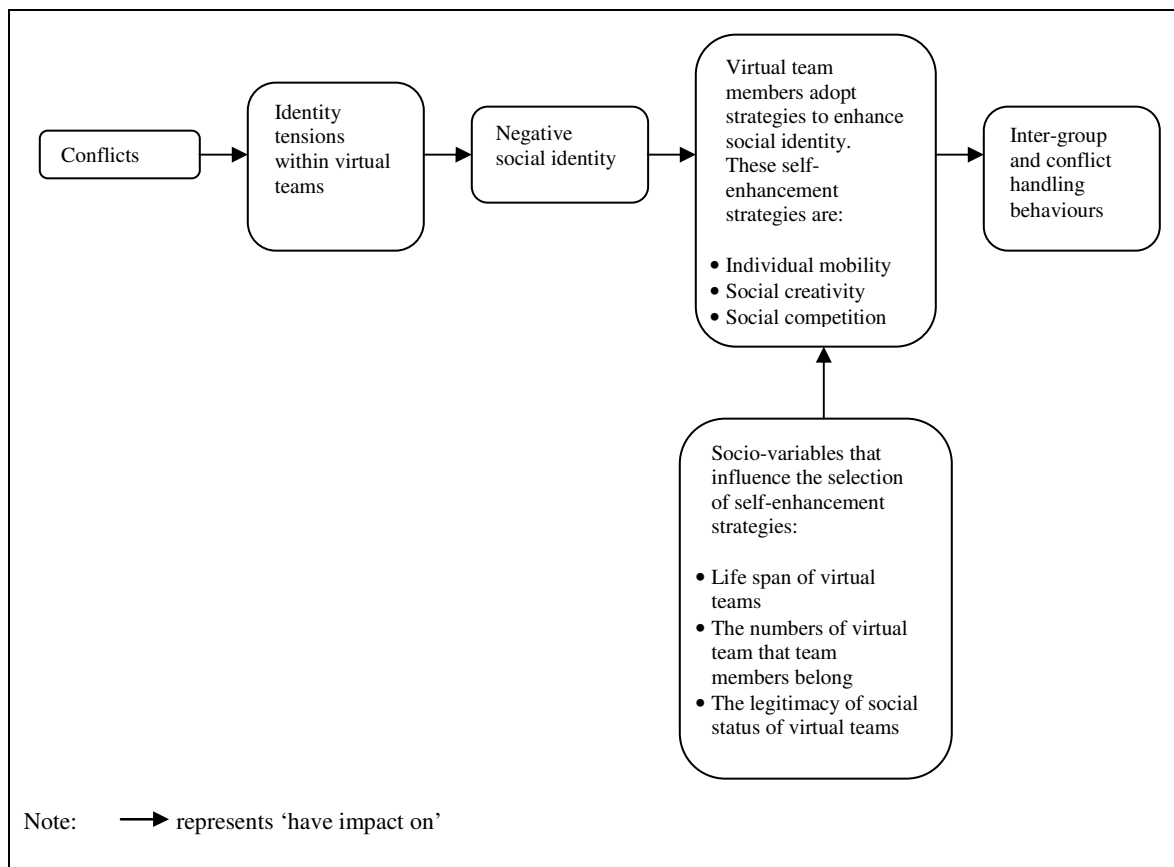


Figure 2: Conflict, identity, socio-variables, self-enhancement strategies and team members' inter-group and conflict handling behaviours in virtual teams.

#### 4.7 Implications for the Current Study

The current study aims to understand the identification processes and their impact on team members' behaviour, which are argued to be important in reducing conflict in virtual teams. In other words, it seeks insights into the role of social identity on conflict when occurring within virtual teams, by investigating the process of social identification and its ongoing impact on inter-group and conflict handling behaviour among the team members. Drawing from SIT and SCT, this chapter further develops a theoretical framework to understand the cognitive and motivational processes when virtual team members identify themselves in virtual teams. In addition, the consequences of such processes on members' inter-group and conflict handling behaviour are examined. Although SIT and SCT have the potential to provide additional insights when combined with the literature of virtual teams, these theories have neglected to take into consideration the effects of broader structural and situational factors on identification processes (see Chapter Three).



In virtual teams, changes in terms of focus of identity and organisational loyalty have become a critical issue because of the influence of team members' diversity and geographical dispersion (Marks and Lockyer, 2005). The antecedents and consequences of identification and behaviour of the virtual team members are governed and influenced by the unique contexts and circumstances present in the virtual setting; for example, the geographical dispersion of team members, the diverse team composition and the information and communication technologies (ICTs) used for communication. As Alderfer (1987) suggests, virtual team members' behaviour can be understood not only in the context of the members' membership in the teams, but also in the structure within which the teams are embedded and the permeability of its boundaries that define such membership. Therefore, it is argued that consideration of personal, structural and situational factors which influence identification processes and members' behaviour in relation to conflict are all important.

In the current study, the needs of team members to reduce uncertainty and increase affiliation are proposed to be the primary motivations driving them to identify themselves with their teams. The degree to which they do this is influenced by the virtual context in which they are operating, such as the diversity of social categories, cultures and geographical locations of the members. Their strength of identity also depends on the role of management in promoting identification within the teams. In addition, identification processes are proposed to have an impact on members' behaviour in the teams. The importance of such strategies cannot be underestimated. Members' choices of self-enhancement strategies are proposed to be influenced by the socio-structural variables in the virtual environment.

To sum up, seven research questions have been raised in this chapter in order to achieve the aim of the current study.

***Research question 1:*** How do virtual team members categorise and identify themselves in virtual teams?

***Research question 2:*** What are the possible motivational factors that drive virtual team members to identification in virtual teams?

***Research question 3:*** To what extent do virtual settings impact on virtual team members' motivation to identify with their teams?

***Research question 4:*** What is the role of management in promoting identification in virtual teams?

***Research question 5:*** What are the possible conflicts that arise in virtual teams and what factors cause such conflicts?

***Research question 6:*** How do virtual team members react to and deal with conflicts arising in virtual teams?

***Research question 7:*** What are the factors that influence the choice of self-enhancement strategies and how they relate to virtual team members' behaviours associated with conflicts?

Details on methodology or how the researcher seeks to achieve the above aim will be discussed in the following chapter.

## CHAPTER FIVE: RESEARCH METHODOLOGY

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### 5.1 Introduction

This chapter begins by discussing the philosophical position on which the current research is based, particularly the ontology and epistemology. Ontology concerns the nature of reality (the way we think of the world), and epistemology focuses on what is regarded as acceptable knowledge. While the researcher's basic beliefs and assumptions dictate the inquiry paradigm, it is important to locate the ontological and epistemological stance that guides the whole research. As a result, a range of philosophical perspectives and methodologies adopted in the existing studies of identity, particularly in the organisational context, were reviewed in order to locate ways for operating the current research.

After a discussion of the appropriate philosophical position, this chapter moves on to describe the methodological choice and research strategy, i.e. the qualitative case study approach and the range of methods that are used within this study for collecting data. As the current research can be considered novel in terms of its theoretical and empirical approach to social identity and conflict in virtual teamwork, an inductive approach was opted for, whereby data was collected to develop the existing theory. This approach, according to Hyde (2000, p.83), is considered a 'theory-building process, starting with observations of specific instances, and seeking to establish generalisations about the phenomenon under investigation'. This allows the subject matter to 'unfold its nature and characteristics' throughout the research process (Burrell and Morgan, 1979, p.6).

Next, the analytical strategy and a triangulation of data collection techniques used to enhance generalisability, validity and reliability across cases and data are discussed. As the research seeks insights into the formation of employee identity and its impact on virtual teamwork, the emphasis is therefore on the context in which identification and conflicts took place. Thus, a small sample of virtual teams is more appropriate for the current study than a large number as with the quantitative approach. As Bryman and Bell (2007) note, quantitative research often 'presents a static image of social reality with its emphasis on relationships between variables' and tends 'not to surface change and connections between

events over time'. However, qualitative research is more 'attuned to the unfolding of events over time and to the interconnections between the actions of participants of social settings' (Bryman and Bell, 2007, p.426).

To study the meaning of employee behaviour and produce a 'thick description' of the complexity of organisational life requires investigation into the different aspects and viewpoints of reality (Stake, 1995; Yin, 2003). Therefore, the case study approach, working with qualitative data is deemed appropriate. The fieldwork is undertaken in seven multicultural teams from four different organisations. This chapter ends by discussing the analysis methods and the limitations of the research.

## **5.2 The Research Philosophy: Critical Realism**

Saunders et al. (2003) note that there are basically three views about the research process which dominate the literature: positivism, interpretivism and realism, and all three have made significant contribution to business and management research. For this piece of research, Critical Realism (which is a version of realism) is argued as being the most suitable, operating subjectively when investigating issues as complex and dynamic as social identity, conflict and teamwork. This section provides justification for the selected research philosophy by discussing Critical Realism and making some major criticisms of the positivists and interpretivists.

One of the most significant examples of realism is associated with the writings of a British philosopher, Roy Bhaskar (Bhaskar 1978, 1979). Bhaskar developed this perspective and published the book *Realist Theory of Science* (1978) in 1975. Pratt (2009) noted that Critical Realism has also been employed and expanded by theorists such as Sayer (1984) and Archer (1995, 2000, 2003) into social science as well as by e.g. Ackroyd and Fleetwood (2000), Fleetwood (2004, 2005) and Reed (2005) in organisational and management research. Critical Realism is a philosophical stance that was developed in response to the limitations of positivism (naïve realism) and postmodernism (Clark et al., 2007, p.523). Both positivism and postmodernism will be discussed later in this chapter. It distinguishes the nature of reality (ontology) from human knowledge about it

(epistemology). There is a differentiation between the reality and our claims to know about the objects of knowledge.

Critical Realism supports the positivist position that there is ‘an existence of a real world, which exists and acts independently of our knowledge or belief of it’ (Benton and Craib, 2001, p.120). However, Critical Realism rejects the positivist’s exclusive focus on observable events by recognising there are truths that cannot be fully apprehended (e.g. the experiences or motives of social actors) (McEvoy and Richards, 2006, p.69).

<b>Domains or modes of reality</b>	<b>Nature</b>	<b>Examples</b>
Empirical	Those aspects of reality that can be experienced either directly or indirectly	Experience of the social actors
Actual	Those aspects of reality that occur, but may not necessarily be experienced	Events and processes
Real	‘Deep’ structures and mechanisms that generate phenomena	Structures and mechanisms with their associated causal power

Table 2: Ontological domains or modes of reality (Adopted from Bhaskar, 1978; Delorme, 1999; Fairclough, 2005; McEvoy and Richards, 2006;)

The ontological assumption of Critical Realism concerning the social world is ‘real’ but it differs from the natural world and is dependent on human action for its existence. In other words, the social world is socially constructed. Critical Realism claims that there are basically three different ontological domains or modes of reality, i.e. the empirical, the actual and the real (Bhaskar, 1978; Delorme, 1999) (See Table 2).

Fleetwood (2005) classified reality under the ‘materially real’, ‘ideally real’ and ‘socially real’. Reality that is ‘materially real’ represents material entities which exist independently whether or not they are observable and known. Reality that is ‘ideally real’ refers to ‘conceptual entities such as discourse, language, ideas and beliefs’ and those that are ‘socially real’ denote ‘practices, states of affairs or social structures that depend on human actions for their existence’ (Fleetwood, 2005, pp.200-201). The recognition of the complexity of reality enables the researcher to gain knowledge beyond his/her perceptions,

beliefs or motives and brings to light the underlying structures that govern them, thus developing a deeper insight into ‘how phenomena are generated’ (Clark et al., 2007).

With regard to the epistemology, Critical Realism accepts the postmodernism perspective, that our knowledge of the world is ‘mediated by a pre-existing stock of conceptual resources’ and other influences (Fleetwood, 2005, p.199). However, critical realists are critical of the postmodernist view that the social world is purely socially constructed and fails to account for the concept that the causal power of structures may shape and influence an individual’s subjective experience and social context. Although critical realists appreciate the value of postmodernist methodologies that centre on individual perception, motivation, experience and human reason as the causal explanation (Bhaskar, 1989), they do not believe that the ‘social world is exhausted by individual consciousnesses and languages’ (Wikgren, 2005, p.18). Instead, Critical Realism suggests that the researchers need to take into consideration the underlying causal mechanism and social structures that are (or are potentially) producing and governing events (McEvoy and Richards, 2006, p.70).

Organisational studies have recently been heavily influenced by culture, linguistics, post-structurism or post-modernism (Fleetwood, 2005; Westwood and Clegg, 2003). Yet for scholars of organisation who reject the idealist view in the analysis of management and organisation, Critical Realism provides an alternative philosophical argument (Willmott, 2005; Ackroyd and Fleetwood, 2000). As Hesketh and Fleetwood (2006, p.685) suggest, Critical Realism views organisations as ‘social entities that consist of a cluster of social structures, institutions, mechanisms, resources, rules and procedures etc., along with the human agents (e.g. employees, shareholders) that activate them’. These authors note that the critical realists’ focus on the ‘agency-structure’ frames suggests the ‘transformational nature of the social entities (e.g. organisations), whereby agents (e.g. employees) draw upon social structures and, in so doing, reproduce and transform these same structures’ (Hesketh and Fleetwood, 2006, pp.685-686).

Furthermore, the emphasis of Critical Realism on an open system is relevant to organisation studies. According to McEvoy and Richards (2006), critical realists argue that the social world operates as a ‘multi-dimensional open system’ and that such an open

system signifies that which lacks event regularities (see also Bhaskar, 1979). They argue that interaction between 'social structures', 'mechanisms' and 'human agency' can have effects and influences on the system (McEvoy and Richards, 2006, p.70). For example, Clark et al. (2007) propose that in the attempt to assess the success of an implemented programme in the health sector, it is necessary to look at the interaction of different facets of an open system and its influence on the performance - simply comparing different types of the programmes imposed by the management is insufficient. They found that it is essential to examine the potential contextual factors and mechanisms that influence the outcomes within and across programmes, as programme effectiveness may be undermined or improved by the unforeseen interruption of the causal contextual power (Clark et al., 2007, pp.526-527).

Critical Realism offers an ontology and meta-theory that has a number of impacts (or inferences) on how researchers approach ideas about social structures, agents and processes in organisations. The following section explains how Critical Realism provides an appropriate basis for developing methodological paradigms for studying identity in organisations.

### **5.3 Critical Realism and Identity**

Identity, in its various conceptualisations, offers creative ways to understand a range of organisational phenomena (Haslam, 2004). Adopting an identity frame within organisation studies has enabled researchers to study organisational behaviour within different philosophical frameworks. In Du Gay's (1996) and Alvesson et al.'s (2008) review of some major approaches to studying identity in organisations, several theoretical orientations and the cognitive interests of the researchers were identified. These authors note that different philosophical perspectives reflect various types of knowledge of constitutive interests and methodology in approaching organisational identity.

For example, from the interpretivist's point of view, identity is seen as an opportunity to enrich the study of organisations with in-depth, often empathetic insights. The interpretivist focus is more on finding the meaning and interpretation of reality. As demonstrated in the study of Meriläinen et al. (2004, p.540) examining the impact of discourses on the

construction of employees' professional self, the researchers focus especially on the 'meanings that employees attach to professional identity, which in turn shape the particular form that expressions of gender take in their talk on work and career'. They claim that identity provides explanations that can explore and assist people's reflection on who they are (their meaning) and what they do (their experience).

The emphasis on a reflection on the self, 'who they are' and 'what they do' is in line with the 'agency' concept of Critical Realism, whereby 'it is only through the activities of social agents that social structures are kept in being [...] but individuals or collective agencies may modify or transform structure' (Benton and Craib, 2001, p.132). As Archer (2002, p.19) notes, an agent is someone who is 'active and reflexive' and 'has the properties and power to monitor his or her own life' and to 'mediate structural and cultural properties of society'.

The agent is viewed as someone who is active and reflective and has properties and power to monitor his or her own life. Critical Realism exposes the relationship between consciousness and sub-consciousness that provokes an awareness and reflection on the self and the individual's actions. Identity loosely refers to subjective matters ('who am I?') and experience ('how should I act?') and thus is the ground in which capacity for agency and action can develop (Byrne, 2003). As Simon and Oakes (2006, p.114) note, identity defines an individual (i.e. what he/she can do) and what he/she wants to do depends on who he/she is.

Applying the concept of 'agency' to teamwork, when employees perceive themselves as members of a team, they will describe and relate themselves more with their colleagues within the teams (Turner, 1982). They often refer to themselves in relation to their colleagues by using the notion of 'we' and 'us', whether consciously or subconsciously. Archer (2002, p.19) notes that the use of 'we' often refers to a form of 'collective action in which the self is engaged as part of the corporate agency or body's attempt to bring about social transformation'.

Social identity affects members' behaviour in the team. Identification affects team members' decision-making, behaviour, stereotypical perceptions of themselves and others,



cohesion (Ashforth and Meal, 1989), commitment (Sass and Canary, 1991) and social support (Haslam and Reicher, 2006) within the team. As proposed in the current study, self-categorisation and identification processes may have a significant impact on employees' inter-group behaviour in virtual teams, in particular on conflict handling behaviour. The particular courses of actions that individuals pursue to achieve positive social identity are believed to have a strong impact on their identification and consequently, their conflict handling behaviour in teams.

The Self-categorisation process is often viewed as a critical mediator between the organisational contexts and behaviour (Haslam, 2004, p.38). SIT claims that group membership depends on the process of self categorisation, in which numerous 'shared and differentiating ways of being in a group become part of the self's way of being' (Simon and Oakes, 2006, p.108). As Ashforth and Mael (1989, p.21) suggest, identification with a team is therefore 'a perceptual cognitive construct [...] not necessarily associated with any specific behaviour or affective states', but rather is based on a sense of oneself as 'psychologically intertwined with the fate' of that team. In short, other people's perceptions influence identification. The influence is thus both 'cognitive and social' (Simon and Oakes, 2006, p.109).

When employees identify themselves with a team, their colleagues with whom they identify are perceived to satisfy the requirement of subjective validation (e.g. 'we are the same and we share the same vision'). Cognitively, the employees possess 'personal power i.e. a reference to agents' subjective and reflexive formulation of personal projects' which allows them to make decisions and carry out actions (Archer, 2003, p.5). However, the achievement of subjective validity is argued as going through a social process whereby the significance of a set of information used for validation is 'interpreted in terms of the normative categories, theories, assumptions, standards and procedures of one's culture' (Turner, 1991, p.151). Ashforth and Kreiner (1999) argue that it is partly through social interaction and integration with the team's values, significance and yardsticks that individuals see themselves through the eyes of others and define themselves.

Overall, individual identification is governed by complex thought processes, including both biological structures and social influence. However, social behaviour cannot be reduced to

biology as individuals possess powers in virtue of their 'biological, physiological, psychological and social make-up where these levels are irreducible to one another' (Hesketh and Fleetwood, 2006, pp.687-688). Critical Realism suggests that people's sense of data is always mediated by a 'pre-existing stock of conceptual resources', which are often used to understand and explain the data and to take correct action (Fleetwood, 2005, p.199).

Although the formation of social identity involves a certain extent of subjectivity, employees can be viewed as social beings who are intrinsic within an organisational context, thus their interaction with their colleagues is often influenced by what their perception of their social identity may be (Bryne, 2003).

In Bryne's (2003) study on women's self and social identity, she claims that though a woman is a particular, unique individual, others would first perceive her as a woman, then as belonging to a particular ethnic group or social class. Hence, this woman's gender, race, and class, based social identity, structure and other people's interaction with her, influence the formation of her identity (Bryne, 2003, p.450).

May (2002, p.63) states that 'like any critical theorist, critical realists examine the structuring of human relations using the criterion of whether these structures promote or constrain the human freedom and dignity of those involved in them'. Critical Realism's focus on the effect of social and structural power on social actors is applicable to the understanding of the formation of employees' social identities. As Archer (2002, p.17) notes, social identity is 'the capacity to express what we care about in social roles that are appropriate for doing this'. It is then argued that the appearance of an employee's social identity takes place at the interface of 'agency and structure' – The agency as well as social and structural power governs the formation of such identities.

It is then proposed that individual differences, contextual and situational factors impact on employees' identification in virtual teams. These factors may directly facilitate or hinder the psychological grouping of employees into teams. Therefore, this research seeks to identify the underlying causal mechanisms or regulatory variables that influence employees' choice of self-enhancement strategies in the identification process. In so doing,

it teases out the potential conflicts or contradictions that may be hidden or distorted by employees' actions in virtual teams. This allows the researcher to better appreciate the power dimension and the effect of such power on virtual team members' collective behaviour.

Although Critical Realism offers an appropriate ontological ground for understanding social identity in the workplace, it has its limitations. Sims-Schouten et al. (2007, p.104, 106) pointed out that critical realists are often criticised for not having a systematic method of distinguishing between the 'discursive and non-discursive', and the interpretation of factors that affect phenomena rests on individuals' choice and standpoint. They further note that although critical realists argue that underlying structures and mechanisms can be discovered and known through phenomena that they generate, their existence can only be inferred from the experience and processes they produce. Since there is no direct causal relationship between those underlying structures and the phenomena, 'the knowledge of reality will always be limited' (Sims-Schouten et al., 2007, p.105).

Nevertheless, Critical Realism's concept of agency and structure is relevant to the study of identity. According to Vandenberghe (2005), Archer (2002, 2003), the dean of the critical realist movement, has successfully applied her theoretical reflections on culture, social structure and human agency to understanding identity issues. Archer concluded that cultural systems can influence the social structures and vice versa and such influence is mediated by the actions of the social agents. When individuals develop their identities, they pursue ultimate concerns (i.e. concerns about physical well-being, performative competence and self-worth) in more or less coherent and feasible life-projects. Further, she argues that it is through the internal conversations a person has with the self that he/she actually orders them, defines the vision of the 'good life' and thereby attains an authentic personal identity that is uniquely his or hers (Archer, 2002, pp.227-230). In other words, a person has the properties and powers to intervene 'the structural and cultural properties of society and thus contribute to societal reproduction or transformation. Such a process is ongoing and always working through reflexive deliberations about the individual's ultimate concerns' (Archer 2002, p.19).

Overall, the social actors have reflexivity but it does not develop in an institutional void (Archer, 2002). Reflexivity often questions the actors, whether there is a conscious, self-direction and self-awareness on their part (Cunliffe, 2003). Like any other participant, the researcher is making sense of social and organisational realities as her own knowledge, values and assumptions influence the process of inquiry. Therefore, the acknowledgement of the potential problem with the notion of reality and reflexivity in the research process is essential. As Edwards (1990) suggests, researchers should locate themselves in the research and during its process of investigation, by making explicit the reasoning procedures that they adopt throughout the research and on a reflexive level. In addition, they need to focus on effect and influence that the researchers may have upon the process of the research i.e. the influence of their 'class, race, assumptions, and beliefs' upon the research and the analysis (Edwards, 1990, p.479).

#### **5.4 The Research Strategy: The Qualitative Approach and Case Study Method**

In research of organisational identity, some scholars have integrated quantitative and qualitative techniques to appreciate the holistic interaction of research methodology (e.g. Grote and Raeder, 2009; Marks and Lockyers, 2005). Yet, most researchers have followed either the quantitative or qualitative paradigm.

The qualitative approach was used throughout the current research because of the limitations of the quantitative approach in providing in-depth interpretations of the consequences of causal powers in a social environment (Modell, 2009). For instance, the complexities of the causal mechanism or variables influencing the phenomena may come from different sources and are unique to a specific situation. These mechanism or variables 'cannot be squeezed into equations and claim universal applicability by using a quantitative approach' or statistical techniques (Gummesson, 2006, p.170). Although statistical techniques may explore relationships between variables which show the propensity resulting from the causal powers of underlying mechanisms, such techniques are limited in generating in-depth and detailed causal explanations suggested by the critical realists (Mingers, 2006; Sayer, 2000, 2004). This research aims to go beyond the possibilities of conflict which occurs in virtual teams, to stipulate in greater detail, the dependent circumstances within which mechanisms and causal power governs employees'

identification and conflicting events. Merely observing the employees' reactions and behaviours in conflict handling with some consistency and uniformity in response to, for instance, the management interventions in promoting team spirit (with an aim to reduce conflicts) is inadequate for comprehending within which situations the causal power governing such possibilities is initiated (see Modell, 2009).

Qualitative approaches search 'beyond mere snapshots of events, people and behaviours' (Bonoma, 1985, pp.199-208). The need for 'deeper empirical exploration' into the 'context-specific factors' which are immersed in the causal powers suggests that the qualitative approach may be an appropriate complement to quantitative methods (Modell, 2009, p.213). The qualitative approach offers 'an array of interpretive techniques which seek to describe, decode, translate and otherwise come to terms with the meaning... of certain more or less naturally occurring phenomena' (Van Maanen, 1983, p.89). This approach involves 'the collection of perceptions of unobserved external world phenomena' (Hunt, 1991, p.282). Social identification is 'the perception of oneness with or belongingness to a group' (Ashforth and Mael, 1989, p.21). The self-categorising of who should be included in and excluded from the group influences the employee's perception of others and themselves (Turner, 1982, 1985). In that sense, theories of identity and identification are infused with perceptions and feelings. The psychological tie between the virtual team members and their teams is a soft or intangible element and can only be understood if the researcher gets to know the thought processes of how these members access information and its environment, develop a sense of the meaning of the self and connect with their teams.

Further, the key strength of qualitative methods is their 'open-ended' approach. This 'allows the theme to emerge during the course of an inquiry' that could not have been expected beforehand (McEvoy and Richards, 2006, p.71). As Gillham (2000) suggests, qualitative methods help to explain complex concepts and variables that are difficult to quantify, as well as relationships that are unlikely to be grasped by planned response categories or standardised quantitative measures. This research does not attempt to test hypotheses but to focus on theory-building. It seeks to connect existing theories (e.g. SIT and SCT) that are used as a conceptual framework with the qualitative data collected. The focus is to work on the empirical information to generate new data. Although SIT and SCT

have proven to be useful frameworks in organisational identity research, the application of such theory to virtual teamwork is still underdeveloped. In particular, there is still little research in exploring identification processes and the relationship between social identity and employees' conflict handling behaviour in the teams (see Chapters Two and Three).

The case study method is appropriate for Critical Realism Analysis in organisations. As Yin (1994) suggests, this method is useful for answering the 'how' and 'why' questions. These questions help to discover the layered entities which contain the structures and mechanisms that generate phenomena. Moreover, case study investigates contemporary events and phenomena within their real-life context and deals with a full range of evidence – interviews, observations and documents collection (Yin, 2003, p.8, 1984). With its triangulated approach of using more than one method or source of data in studying social phenomena, the complexity of organisational life and the meaning of employee behaviour can be better appreciated.

To provide a triangulation of evidence, the multiple case study method is chosen. As Yin (2003) notes, when compared to the single case study method, the multiple case study method increases the validity of qualitative research because the latter is more useful for situations when a single case represents an extreme example or serves a revelatory or longitudinal purpose. Having two or more cases can diminish the drawback of having 'the uniqueness or artifactual condition surrounding the single case' (Yin, 2003, pp 40-54).

Evidence gathered from multiple case studies is more convincing and the overall study is more robust - multiple case design follows a 'replication logic' as opposed to 'sampling logic' (Ang et al., 2002, p.273). As Eisenhardt and Graebner (2007) argue, each case represents a separate individual experiment as an analytic unit. Multiple cases replicate, contrast and expand the existing theory. Given the diverse contexts of the virtual teams in terms of the industry, team size, culture and management style, their impact on identity and conflict could differ from one team to another. If under these varied circumstances common patterns or conclusions can be drawn, the results obtained would be more rigorous and more readily allow for generalisation of findings across social settings (Eisenhardt and Graebner, 2007, p.25).

## **5.5 Analytical Strategy: The Research Process**

The present research seeks deeper insights into a new channel and environment, using information drawn from empirical study to generate new theory (Weischedel et al., 2005, p.62). As such, an analytical strategy is needed, which is capable of comprehending a constant evaluation and contrast of data with theory and a continuous refinement between theory and practice (Dooley, 2002, p.336).

Eisenhardt's (1989, pp546-548) research process is used as an analytical strategy as the research progresses because its framework includes 'a priori specification of constructs, population specification, flexible instrumentation, multiple investigation, cross-case analysis tactics' and is believed to add strengths in terms of 'novelty, testability and empirical validity'. According to Eisenhardt (1989), although the theory building process can be found in other research, e.g. Yin's (1981, 1984) case study design, Miles and Huberman's (1984) specific techniques for analysing qualitative data, and Glaser and Strauss's (1967) comparative method for developing grounded theory, none has provided a systematic framework for theory building from cases.

Further, this process of building theory from cases is appropriate for new research areas for which existing theory seems inadequate (Eisenhardt, 1989; Dooley, 2002). The iterative nature of the process allows the researcher to move forward and backward between steps taken during the research. The researcher may concentrate on cross-case comparison and at the same time, move back to redefine research questions or return to the field to gather additional information. This enables the researcher to reconcile evidence across cases, types of data and literatures. As Eisenhardt (1989, p.546) claims, such reconciliation potentially assists in generating novel theories with less researcher bias because constantly reconciling conflicting realities against theory tends to 'unfreeze' the thinking of the researchers and forces them to reframe their perceptions into new perspectives.

This analytical strategy is not free from criticism. In Piekkari et al.'s (2009) review of case study practices within the international business discipline, they argue that Eisenhardt's (1989) theory-building process tends to be more variable-orientated and that she adopts the positivist perspective in generating theory. They then urge researchers who apply the

theory-building process to be clear about the philosophical foundations and theorising purposes of their studies and not to follow Eisenhardt's knowledge claim blindly. Although Eisenhardt's (1989) theory-building process was used to guide data analysis in the current thesis, the application of the steps was tailored to the aims and philosophical positions of this research. These steps included getting started, selecting cases, crafting instruments and protocols, entering the field, analysing data, shaping hypotheses, enfolding literature and reaching closure. The application is described and presented in Table 3.



Process of building theory from case study research	Application to the present research
<b>Getting started</b>	<ul style="list-style-type: none"> <li>• Identification of gaps in the literature</li> <li>• Establishment of the rationale for the research project</li> <li>• Definition of research aims and questions</li> </ul> <p><i>(The overview of the research project and aims was written down – it was presented in Section A of the case study protocol in Appendix I)</i></p>
<b>Selecting cases</b>	<ul style="list-style-type: none"> <li>• Specification of samples for the research (organisations and virtual teams)</li> </ul> <p>Virtual teams 1 to 7 in companies PEACE, FORTUNE, BATIK and DELIGHT were chosen.</p> <p><i>(The criteria for case selection are listed in Section B of the case study protocol in Appendix I)</i></p>
<b>Crafting instruments and protocols</b>	<p>Research procedures:</p> <ul style="list-style-type: none"> <li>• Selection of the research strategy and methods for data collection</li> <li>• Draft case study protocol</li> <li>• Draft interview protocol according to research questions and objectives</li> <li>• Conduct pilot interviews</li> <li>• Initial approach to organisations</li> </ul> <p><i>(The data collection methods are discussed in Section C of the case study protocol in Appendix I)</i></p>
<b>Entering the field</b>	<ul style="list-style-type: none"> <li>• Data collection from cases</li> <li>• Necessary adjustments during the data collection processes</li> </ul>
<b>Analysing data</b>	<ul style="list-style-type: none"> <li>• Detailed narrative descriptions (history, background) for each organisation, team and site</li> <li>• Within-case analysis</li> <li>• Cross-case analysis</li> </ul> <p><i>(The data analysis guideline is presented in Section D of the case study protocol in Appendix I)</i></p>
<b>Shaping hypotheses</b>	<ul style="list-style-type: none"> <li>• Iterative tabulation of evidence for each construct</li> <li>• Trace of evidence for ‘why’ behind any causal relationship found</li> <li>• Identification of underlying power and mechanism of outcomes</li> </ul>
<b>Enfolding literature</b>	<ul style="list-style-type: none"> <li>• Comparison of conflicting and similar literatures</li> </ul>
<b>Reaching closure</b>	<ul style="list-style-type: none"> <li>• Results and conclusions reached</li> <li>• Linking evidence to theoretical framework</li> <li>• Contribution to the theory and practice</li> </ul>

Table 3: The research process (Source: Eisenhardt’s process of building theories from case study research - Eisenhardt, K. M. (1989) ‘Building theories from case study research.’ *Academy of Management Review*, 14 (4), 532-550)

Eisenhardt (1989) suggests a prior specification of constructs, is essential at the early stage of research. However, Piekkari et al. (2009) comment that such a recommendation implies

the positivist positioning beneath her knowledge claim (i.e. the research is more variable-orientated). Although several constructs (e.g. determining factors of identification in virtual teams) from the literature were identified at the stage of ‘getting started’, the intention was to establish a focus for the current research. For example, with reference to the extant literature, the research object (virtual teams) is determined and the employees’ identification is highlighted as possibly associated with the team’s political, social, historical and personal issues. Research questions can then be targeted at ‘a small number of events to study how these relationships are formed, emerged and why’ (Piekkari et al. 2009, p.339). As Eisenhardt (1989) stresses, ‘no construct is guaranteed a place in the resultant theory [...] research questions may shift during the research [...] theory-building research is begun as close as possible to the ideal of no theory under consideration and no hypotheses to test’ (Eisenhardt, 1989, p.536).

In response to the Piekkari et al. (2009) comment that Eisenhardt adopted the positivist goal of theory, the research steps were cautiously applied while considering the aim of the current research, to answer the why and how questions. Hence, producing a holistic view and localising causal explanations for the outcome of each case under investigation is important. When building hypotheses, the focus of theorising is on revealing the underlying causal powers and mechanisms that generate events and outcomes in specific contexts, rather than testing hypotheses and generalising results. As Eisenhardt (1989, p.542) claims, although this step involves measuring constructs and verifying relationships, it is more essential to understand the dynamics underlying the emergent relationships.

Overall, Eisenhardt’s (1989) theory-building process not only assists the researcher to stay focused on a topic in the early stages of research, but its continual movement between theory and data allows him or her to embrace the fresh insights and perspectives emerging from the empirical evidence. Additionally, the iterative nature of the process enables the researcher to take account of the extended timeframe and related deviations in the methods chosen for this research. Other aspects of Table 3 are discussed in the remaining sections of this chapter.

## **5.6 Generalisability, Validity and Reliability**

Qualitative research grounded on completely different epistemological and ontological assumptions compared to quantitative research (Denzin and Lincoln, 2000). The former is often contextual and subjective whereas the latter is more generalisable and objective. As Ambert et al. (1995) note, the critical goal for qualitative research is not on the generalisation of populations but is to 'seek depth over breadth and to learn the subtle nuances of life experiences as opposed to aggregate evidence' (as cited in Whitemore et al., 2001, p.524). However, a quality empirical social research should have high validity and reliability (Gillham, 2000).

There are two basic criticisms of the validity of case study research, i.e. external and internal validity. The former concerns the generalisation of the findings of the current case study with other settings (Smith and Robbins, 1982; Berger, 1983) and the latter concerns the extent to which the correct cause-and-effect relationships have been established (McCutcheon and Meredith, 1993). The threat of internal validity arises from the investigators' interpretation (Neck, et al., 1996).

In response to the criticisms, one needs to acknowledge that the external validity of case study is dependent on the logic and conviction of the theoretical reasoning, rather than the statistical criteria (Mitchell, 1983). As Bryman and Bell (2007) argue, in qualitative research, the findings are to generalise theory rather than samples. What is essential is the quality of the theoretical inferences from the data.

To increase the external validity for the present study, replication of logic strategy was used across the seven cases chosen. The deployment of multiple case studies allows the existing theories to be tested by replicating the findings from one case to another. The constant comparison of findings against existing theories enhances the analytical generalisation in this research. The cross case analysis not only allows the researcher to identify the replication patterns across cases, but seeks a sequence of evidence for the relationship studied on the basis of the framework. As described in the previous section of this chapter, the theory-building process allows the researcher to move backward and forward within

and between cases with clear cross reference among data, methodologies, procedures and the resulting evidence.

Triangulation is adopted to enhance the internal validity of the research. Data triangulation is attained by collecting data from seven virtual teams in four organisations with the guidance of the theory-building process. Further, multiple methods, i.e. semi-structured in-depth interviews, observation and collection of documents are used for data collection. In addressing the threat of researcher bias towards interpretation, the research design, data analysis and findings were discussed in great detail with supervisors and other researchers and practitioners were involved in the research on identity and virtual teamwork.

Miles and Huberman (1994, p.278) note that the theory-building process was designed to ensure reliability - 'the extent to which the process of the study is consistent and reasonably stable over time and across researchers and methods'. At an early stage, procedures and requirements to be followed were written down in a case study protocol (See Appendix I). Such a protocol outlines the research objectives and questions, the data collection procedures (which include the criteria for case selection, steps in establishing contact (See Appendix II the proposal for companies and Appendix III the letter to companies), scheduling field visits, interview protocol (see Part a of Section D in Appendix I), analysing steps and producing management reports. All the data was systematically recorded and well documented for referencing purposes. The case study database enables the researcher to replicate procedures (e.g. data collection steps and analysis structure) consistently across the seven cases.

## **5.7 Operationalising the Research**

The multiple case study method was chosen. Prior to data collection, a case study protocol (see Appendix I) was developed and used as a research guide. In the protocol, the criteria for case selection are laid down based on the literature review and cases were then chosen accordingly. In other words, organisations and virtual teams were selected using a purposive sampling. The organisations chosen were multinational organisations operating virtual teams. Details of the criteria are listed in Table 4.

	<b>Criteria</b>	<b>Rationales</b>
'Virtualness'	Distributed in different locations and the team members communicate using the information and information technologies (ICTs).	To examine whether contextual factors such as proximity and the use of the Information and Communication Technologies (ICTs) influence employees' identity in the virtual teams.
Virtual workers' engagement in teamwork	Members engaged in virtual teams and co-located teams at the same time.	To identify variations in employees' identity with the co-located and virtual teams.
Types of virtual teams	Since the focus is on issues of conflict, virtual teams dealing with short term projects will be selected.	To observe employees' interaction in accomplishing the project and to capture potential conflicts that happened during the project.
Life span of the virtual teams	Teams selected consist of permanent and temporary virtual teams.	To identify the effect of the life span of the virtual team on members' identity in the teams.
Project handled in virtual teams	<ul style="list-style-type: none"> <li>• Projects involve a variety of functions ranging from technical to service.</li> <li>• Projects consist of those that require high interdependency to low interdependency of virtual workers; and projects with high urgency to low urgency.</li> </ul>	To identify the impact of task characteristics on members' identity in the teams.
Composition of workforce	multicultural	To embrace a more complete picture of the multicultural aspect which would provide a better understanding of the diversity in terms of location, demography, culture, information and value.

Table 4: Criteria for selecting cases

There is no specific guide as to how many cases should be selected for a research project. Eisenhardt (1989, p.793) recommended that 'cases should be added until theoretical saturation is reached'. Lincoln and Guba (1985, p.204) suggest that a selection of cases should reach to the point of 'redundancy'. Yet, some scholars are particular about numbers. For example, Hedges (1985, pp.76-77) indicates in practice 'four to six case studies usually form a reasonable minimum for a serious project'. Similarly, Eisenhardt (1989) suggests a number of four to ten cases, but there is no one definite or perfect figure. She suggests that with the number of cases less than four, it is problematic to 'generate theory with much complexity, and its empirical grounding is likely to be unconvincing' (Eisenhardt 1989, p.545).

An empirical study with at least four cases was chosen for the present research because the number falls within the range recommended in those literatures. As virtual teams involve people from different locations, time and funding to conduct fieldwork are critical factors, thus a large sample of cases may not be feasible. One of the concerns was the possibility of observing different sites (e.g. local office, sitting in meetings) to gain insights into the local working patterns, employees' interactions and workflow.

### **5.7.1 Descriptions of the Cases**

In total, the researcher gained access to four companies and was granted permission to study seven virtual teams. In this study, each virtual team constitutes a case. Brief descriptions of the organisations and the teams are presented in this section. The sample profile is listed in Table 5.

Company	PEACE				FORTUNE	BATIK	DELIGHT
Virtual Team	Team 1	Team 2	Team 3	Team 4	Team 5	Team 6	Team 7
Research site	UK				UK	MALAYSIA (BATIK)	MALAYSIA – Kuantan
Number employed in team	2	3	7	2	1	1	1
Number interviewed from each team	2	3	6	2	1	1	1
Research site	SINGAPORE				BRAZIL	MYANMAR (SP Ltd)	MALAYSIA – KUALA LUMPUR
Number employed in team	3	8	3	1	2	1	1
Number interviewed from each team	3	8	3	1	2	1	1
Research site	-				US	SINGAPORE (HB Ltd)	MALAYSIA – MELAKA
Number employed in team	-				2	1	1
Number interviewed from each team	-				1	1	1
Research site						SINGAPORE (Z_LOGISTIC)	
Number employed in team						1	
Number interviewed from each team						-	
Total number in teams	29				5	4	3
Total number interviewed	28				4	3	3

Table 5: Sample profile for the research

#### **5.7.1.1 Case study PEACE - Teams 1, 2, 3 and 4**

PEACE is a leading international shipping company, providing customers around the world with container transportation services. The company operates container liner services with a fleet of over 100 container vessels and has a global network of feeder services spread across a wide range of ports in South East Asia and the rest of the world. The operations encompass services to many major hub ports around the world, covering most countries in the Far East, Europe and other countries. The company has more than 23 offices worldwide with its head quarter's office located in Singapore and its agency network across a range of countries.

With its workforce of 11,500 staff worldwide, virtual teamwork and good communication via the Information and Communication Technologies (ICTs) is central to day-to-day operations. Employees based in remote locations are grouped and work together in teams for a particular service(s). For example, in the Far East European Service (FES), employees from Singapore (the HQ) work closely with those in the UK branch who can provide expert advice to meet the local customers' requirements. The London office is also involved in other cross trade services within the PEACE network.

The researcher was granted access to the London office, which has five divisions. These divisions are Pricing, Sales and Marketing, Customer Service, Fleet Management and Accounts divisions. The researcher was not given access to the Accounts division.

In Singapore, the teams consisted of employees from the trade, operational and fleet management divisions in Singapore. The researcher was given access to all the three divisions. For PEACE, the employees of Pricing, Sales and Marketing and Customer Service teams in the London office worked closely with those of Trade, Operational and Fleet Management Divisions in Singapore. They were grouped based on the shipping services provided to different locations worldwide, the Far East European Service (FES). The make-up of the employees in Teams 1, 2, 3 and 4 are listed in Table 6. The employees interviewed included those who held managerial positions (general manager, manager and deputy manager) as well those who were below management level (see Table 8).



	Team 1		Team 2		Team 3		Team 4	
Location	UK	S'pore	UK	S'pore	UK	S'pore	UK	S'pore
Division	Pricing	Trade	Sales and Marketing	Trade	Customer Service	Operational	Fleet Management	Fleet Management
Number of employees in division	2	3	3	8	7	3	2	1
Total number of employees in team	5		11		10		3	
Total number of employees interviewed	5		11		9		3	

Table 6: Employees in Teams 1, 2, 3 and 4 of PEACE

Team 1 consisted of five members all of whom took part in the study - two from the UK and three from the trade divisions in Singapore. This team quotes and monitors the pricing of imports and exports for the FES. The team monitors trade rates, assists in the sales activities, looks after the demand and surplus areas for equipment, facilitates the return of equipment to those demand areas and maintains the standard of the special equipment.

Team 2, the Sales and Marketing team, consisted of eleven employees. All of them participated in the research, three from the UK and eight from the Singapore HQ. The employees manage different market information for Europe. They look after the trade between PEACE, Europe and PEACE, South East Asia. Their job scope includes arranging vessel schedules and freight collection, looking after the vessels, space allocation, pricing and trade.

The Customer Service (CS) team (labelled, Team 3) consists of ten employees. However, only nine employees participated in the research, six from the UK branch and three from Singapore HQ. Team 3 takes charge whenever a contract is secured by Team 2. All

bookings come through Team 2. Once the rate quoted by Team 2 has been agreed, the contract will then be passed to Team 3. From there, the relevant agencies of PEACE and the HQ will be informed of the booking. Team 3 often works closely with the local agencies in monitoring information about trade. The team is in charge of the documentation such as bills of lading and invoices and once the documentation is completed, the responsibility would then pass on to the Operational Division in the HQ. Employees in the Operational Division will then plan and schedule the ship journey, ensuring the sailing follows its schedule and reaches the destination on time. Information about the shipment would need to be communicated back to employees in the UK. Although the operation also involves the Operational Division in the UK, they were excluded from the fieldwork as permission to interview them was not granted due to the pressure of work on the Division.

The Fleet Management team (Team 4) manages ships for FES. This team consists of three employees – two from the UK branch and one from Singapore HQ. All of them took part in the current study. In Europe, the FES owns eleven ships. However, out of the eleven owned ships, three are under the direct control of the UK branch and eight have been contracted out to another shipping company in Scotland. Although the functions of managing all eight ships are the responsibility of the shipping company in Scotland, it is the duty of Team 4 to oversee the ships. For the three ships under the control of the UK branch, Team 4 is responsible for all the technical issues and functions such as manning, cruising and purchasing. However, the operational issues such as voyages, cargo and the change of scheduling are done at the Singapore HQ, e.g. the operations for all the vessels (such as arranging cargos and scheduling). When the ships are sailing eastward, all the planning and scheduling for the European vessels is done by Team 4. The team also looks after the health and safety issues for the ships, cargo, vessels and the environment.

#### **5.7.1.2 Case Study FORTUNE - Team 5**

FORTUNE is a leading global provider of technology solutions for the energy sector and other industrial markets. The company designs, manufactures and services systems and products such as subsea production and processing systems, and surface wellhead systems for the oil and gas industry. The company has a workforce of approximately ten thousand and operates twenty-three manufacturing facilities in nineteen countries. FORTUNE's

Subsea Research and Development (R&D) consists of four divisions, one of which deals with Well Systems (WS). Under the WS group, there are sub-groups in charge of trees, wellheads, completions and workovers. The team studied is called the Integrated Value Engineering (IVE) group (labelled Team 5) which is a sub-group of the WS group. The IVE group undertakes a variety of projects in relation to fabrications, clad welding and hydraulic fittings.

Team 5 consisted of engineers, people with commercial ability, manufacturing personnel and managers. This team worked on inductive pipe bending. The project was initiated because an engineer who discovered that four other plants were working independently on the same issue at the same time. The project sought to achieve economies of scale and consistency when purchasing materials. A global understanding and consensus on how to carry out induction bending (termed as clad pipe) needed to be reached. The goal was to come up with one standard procedure and ideally one supplier and one raw material. Therefore, a virtual team was formed and four plants located in the UK, US, Brazil and Norway voluntarily participated in the project. There were six employees in the team - one from the UK (the leader of Team 5); one from the US; two from Brazil and two from Norway. All employees took part in this research except the two from Norway.

#### **5.7.1.3 Case Study BATIK - Team 6**

BATIK is a private limited company registered in Malaysia. The company's core business is the distribution of floor varnish to the parquet industry. The company has the right to appoint dealers throughout Malaysia to market these products. The company is also the appointed distributor for specialty products used by various industries, especially in the shipping industry. BATIK has two related companies which are both registered in Singapore and Yangon, Myanmar respectively. The related company in Singapore is LM Ltd while in Yangon, Myanmar it is SP Ltd.

LM Ltd's principal activity is to act as import agent for SP Ltd in Myanmar. LM Ltd conducts a floor parquet varnish business in Singapore for BATIK's product while SP Ltd's business is more to supply various industrial products for their local Myanmar market. When orders arrive which require the products to be sourced from the overseas market (e.g.

from Malaysia, Thailand, Singapore, China and Philippines), SP Ltd instructs LM Ltd (who was appointed as a buying agent by SP Ltd) to place the order on its behalf to purchase the products.

The operation of the company is managed by BATIK in Malaysia. Import and export shipments involve mainly the employees of BATIK (the middle man) and SP Ltd (acting as buyer to purchase products from overseas). A purchase order from Myanmar would be received via SP Ltd. After sourcing the wanted product, BATIK prepares all the shipping documents needed, including the submission of LC (Letters of Credit) to and negotiations with the relevant bank. Apart from BATIK and SP Ltd, there are other agencies involved in the shipment, i.e. the shipper and the insurance agent. These agents advise the company on sailing details and ensure the shipment is covered by marine insurance.

Team 6 handled an importation shipment from Singapore to Myanmar. This virtual team comprised of the employees of BATIK and SP Ltd as well as the two other agencies. However, the insurance agent, HB Ltd, was chosen for this research instead of the shipper because most of the insurance of BATIK's shipment was provided by HB Ltd and both companies had worked together for years on a permanent basis. As for the other agency, the shipper, it is usually appointed by the suppliers themselves and is often subject to change. During the data collection stage, Z\_LOGISTIC located in Singapore was the shipper for the importation. Because of the frequent changes of shipper, access was not granted for conducting fieldwork with them. Only representatives from BATIK, SP Ltd and HB Ltd were interviewed. Therefore, although Team 6 consisted of four representatives, only three were interviewed. The representatives interviewed were from BATIK in Malaysia, SP LTD in Myanmar and HB Ltd (an insurance company) in Singapore.

#### **5.7.1.4 Case Study DELIGHT - Team 7**

DELIGHT is a chemical solution provider in Asia Pacific engaged in distribution, manufacturing, terminalling and logistics for petrochemical related industries. The company straddles seven Asian countries with offices in ten major cities in the Asia Pacific region. The company sources and distributes more than one hundred types of chemicals. Chemical solvents are sourced locally and globally, and products are sold locally or

exported worldwide. The Manufacturing Division comprises the following sections - Steel Drum, Manufacturing and Paint. The company produces industrial products such as PVAc, Resins and Formalin. DELIGHT also invests in the bulk terminal business by building tank farms, jetties, and pipelines to carry out the terminal operations from the point of vessel arrival until the products are stored in the tanks. In Malaysia, DELIGHT provides logistic services for both its own products and external customers' products.

The DELIGHT General Human Resource (GHR) Bulletin team (labelled Team 7) produces and compiles articles for the company's GHR Bulletin on a quarterly basis. The project involves branches of human resources (HR) personnel from several locations. There is a total of seven HR personnel located in Indonesia, Malaysia and Singapore. Representatives of the branches contribute to producing the GHR Bulletin. Team 7 has five members – three from Malaysia (Kuantan, Melaka and Kuala Lumpur), one from Indonesia and one from Singapore. Out of these five HR personnel, only those located in Malaysia participated in this research. Representatives from Singapore and Indonesia were not directly involved in writing articles for the October issue so there was no interaction between them and the others. As a result, two HR Managers and an HR Assistant Manager who interacted closely in compiling the October issue were interviewed.

This research seeks insights into the employees' identification process in virtual teams and how such processes affect conflict in the teams. The concern is to generate a research design that permits both the observation of the construction of identity at team level (in virtual settings) and the impact of the identification processes on conflict in the teams.

In addressing the employees' collective self, individual cognition and experience in the teams were examined. Employees were asked to reflect on and discuss their perceptions and experience of being a team member, as well as their contextual and situational environment in the team. Semi-structured in-depth interview is used as a main research tool, along with observation within the sites and collection of documents. The research techniques used are presented below in detail, and in the sequence in which they were used. A summary of the way in which the various research methods addressed the research questions is displayed in Table 7.

Research questions	Research method
1. How do virtual team members categorise and identify themselves in virtual teams?	Semi-structured interview
2. What are the possible motivational factors that drive virtual team members to identification in virtual teams?	Semi-structure interview
3. To what extent do virtual settings impact on virtual team members' motivation to identify with their teams?	Semi-structured interview, observation
4. What is the role of management in promoting identification in virtual teams?	Semi-structured interview, observation
5. What are the possible conflicts that arise in virtual teams and what factors cause such conflicts?	Semi-structured interview, observation, documents (electronic correspondence)
6. How do virtual team members react to and deal with conflicts arising in virtual teams?	Semi-structured interview, observation, documents (electronic correspondence)
7. What are the factors that influence the choice of self-enhancement strategies and how they relate to virtual team members' behaviours associated with conflicts?	Semi-structured interview, observation, documents (electronic correspondence)

Table 7: The relationship between research methods and research questions

### 5.7.2 Semi-structured Interviews

The data collection process involved in-depth interviews, observation and the collection of archival materials and analysis of employees' electronic mail discussions. The interview is a useful method within the case study approach for collecting descriptive data. It allows the researcher to collect in-depth sets of data (Saunders et al., 2003). Semi-structured in-depth interviews were conducted with thirty-eight employees, including team leaders. This equates to more than 75% of the total employees studied. Details of participants in these interviews are listed in Table 8 (See also Appendix V, the detailed breakdown and

biographical information of interviewees). To gain a width of perspective and information, interviews were undertaken with a range of team members who had a variety of functional responsibilities and were located across the research sites.

Organisations	Teams	Sites	Positions	Gender		Years of experience			
				M	F	< 3 years	3 to 5 years	> 5 and < 10 years	> 10 years
PEACE	1	UK	General Manager	√				√	
PEACE	1	UK	Europe Trade Manager		√			√	
PEACE	1	Singapore	Trade Manager	√				√	
PEACE	1	Singapore	Senior Trade Executive	√		√			
PEACE	1	Singapore	Trade Executive	√		√			
PEACE	2	UK	Senior Sales and Marketing Executive		√			√	
PEACE	2	UK	Marketing Executive	√		√			
PEACE	2	UK	Marketing Executive	√		√			
PEACE	2	Singapore	Assistant Trade Manager	√			√		
PEACE	2	Singapore	Deputy Trade Manager		√			√	
PEACE	2	Singapore	Deputy Trade Manager		√			√	
PEACE	2	Singapore	Senior Trade Executive		√		√		
PEACE	2	Singapore	Trade Executive	√				√	
PEACE	2	Singapore	Trade Executive		√	√			
PEACE	2	Singapore	Trade Executive	√			√		
PEACE	2	Singapore	Trade Executive		√		√		
PEACE	3	UK	Customer Service (CS) Manager		√	√			
PEACE	3	UK	Senior CS executive	√			√		
PEACE	3	UK	CS Executive	√		√			
PEACE	3	UK	CS executive	√		√			
PEACE	3	UK	CS Executive	√			√		
PEACE	3	UK	CS Executive		√	√			
PEACE	3	Singapore	Deputy Operational Manager	√				√	
PEACE	3	Singapore	Ship Planner	√			√		
PEACE	3	Singapore	Ship Planner	√			√		
PEACE	4	UK	Fleet Division Manager	√		√			
PEACE	4	UK	Fleet Division Executive	√				√	
PEACE	4	Singapore	Fleet Division Manager	√					√
FORTUNE	5	UK	Engineering supervisor	√					√
FORTUNE	5	USA	Lead Metallurgist	√				√	
FORTUNE	5	BRAZIL	Welding specialist	√					√
FORTUNE	5	BRAZIL	Engineering Department Manager	√					√
BATIK	6	Malaysia	Accounts and Admin Executive		√	√			
BATIK	6	Myanmar	Purchasing Manager		√		√		
BATIK	6	Singapore	Division Manager		√		√		
DELIGHT	7	Malaysia – Kuantan	HR Executive		√		√		
DELIGHT	7	Malaysia – Kuala Lumpur	HR Executive		√	√			
DELIGHT	7	Malaysia - Melaka	HR Manager		√	√			

Table 8: Details of interviewees



Semi-structured interviews enabled the researcher to ‘probe’ answers, whenever she wanted the respondents to explain or build on their responses. In the interview, the researcher would refer to a set of pre-determined topics and questions to be covered but the questions and the sequence of asking were subject to change from interview to interview (Saunders et al., 2003).

The interview protocol designed at an early stage of research improves the reliability of the qualitative studies as it ensures a consistent pathway for analysing the interview data (Yin, 1994). It also serves as a reminder regarding the information needed and why. The interview questions broadly focused on employees’ individual driving factors to identification; their attachment, sense of belonging and experience of working in virtual teams and the way they handle conflict.

Prior to the main case studies, the content of the interview protocol was tested using two pilot interviews. Such interviews are effective tools to assess the usefulness, reliability and validity of the interview protocol for case study research (Eisenhardt, 2003). One Asian woman and one British man were interviewed. Both informants had several years of experience in virtual teams in multinational organisations. As the teams studied were formed of members from Western and Eastern countries, both informants were able to contribute their viewpoints as a Western man and Asian woman. Valuable advice was obtained and the interview protocol was then refined and improved. The revised set of interview questions is found in Appendix IV.

The researcher changed the order of the interview schedule where appropriate, depending on the specific situation emerging during the interview process. Owing to the differing backgrounds and cultures of the workforce, the researcher was required to re-phrase questions to suit the different settings and business environments. In certain cases, some questions had to be omitted. Two examples further elaborate this point. Firstly, questions related to the mechanism used in monitoring the projects such as interim reports and testing schedules had to be re-phrased when interviewing employees in Team 7, because such mechanisms were not relevant to projects with low urgency. Questions like ‘how do you go about monitoring the whole process?’ or ‘Is there any way that you use to make sure the members produce the articles in time?’ seemed more appropriate. Another situation was

when interviews were conducted with employees from South East Asia. The word ‘conflict’ was a clearly straightforward term to them, rather than what was originally written in the interview guide – ‘What are the “problems” you have encountered when working with others in the team?’ When the researcher explained that the purpose was to identify conflict events, respondents were willing to recall and elaborate on the incidents.

Interviews lasted an average of an hour (See Appendix VI the interview schedule). With the permission of the respondents, all the interview sessions were tape-recorded. The audio-taping assisted the researcher to engage more effectively in the discussion and recall the collected data at a later stage. Before each session began, the purpose of the research was communicated to the informants. The confidentiality of the data and anonymity of the interviewees were also assured. Although a management report was required by certain companies at the end of the fieldwork, the informants were not identified and their names were disguised. All tapes were subsequently transcribed by the researcher. The transcripts were then analysed, locating keywords, common themes and patterns across cases.

One of the limitations of the interview method is concerning the validity i.e. the quality of the data may be reduced by the interaction between the researcher and the informants. Sometimes, it is difficult for the researcher to stand back and be objective, bias may be introduced (Kumar, 1999). Checklists (See Appendix IV- the interview questions) were designed to be used with some of the interview questions to serve as a guide for the informants. Items listed in the checklists were based on the theoretical framework developed from the literature review. The informants were not restricted from commenting on the items listed in the checklist as they were encouraged to give their viewpoint under the ‘other(s)’ category. The interviewees were allowed to explain, elaborate further, and have different viewpoints from those assumed in the prepared interview questions.

For PEACE, the researcher visited the London office to conduct the fieldwork. During the company visits, time was allocated for observations. Fieldwork was also undertaken in the company HQ where the researcher spent about two weeks conducting interviews and observations. A total of fifteen employees were interviewed in Singapore. In total, the researcher spent about two months completing fieldwork in the company’s London and Singapore offices.

Data collection occupied a large portion of the second year of the researcher's study. Fieldwork in FORTUNE took her almost a year to complete due to some unforeseen circumstances. Apart from conducting interviews, visiting sites and sitting in on meetings; there were numerous postponements of the team's project. The project had to be put on hold for more than six months. One significant reason was that the main work of the employees was for the local office and they joined the team on a voluntarily basis. Each representative had their own concern for the application of the global specification to their local context; thus conflicting viewpoints often arose when it came to negotiations. As a result, consensus was hard to reach. The initial plan was to conduct face-to-face interviews with the team members from Brazil and US when they attended meetings in the UK. However, this was not possible so telephone interviews with the two informants were conducted.

As for BATIK and DELIGHT, the process in the organisations for conducting fieldwork was 'smoother'. The researcher spent about three weeks conducting face-to-face interviews and observation in the two companies. Permission was obtained from all four companies to follow-up the interviews via e-mails or telephone, should clarification or further information be required at a later stage.

### **5.7.3 Observation**

Observation was undertaken as it helps develop a more in-depth picture regarding social relationships. This research method is a 'purposeful, systematic and selective way of watching and listening to an interaction or phenomenon as it takes place' (Kumar, 1999, p.105). In this research, the researcher remained inactive, observing and listening to the happenings and interactions among the virtual team members and drawing conclusions from them. With non-participant observation, insights into the different sets of local working patterns, workflow, and social interactions among the employees were sought.

The researcher was able to undertake observation sessions in every company (except in DELIGHT) by walking around taking notes, observing how the employees worked, sitting in on meetings using teleconferencing, and visiting different branch offices. Hours were spent sitting in meetings, listening to employees' communicating, observing their

interactions and workflow. The access for observation varied across the four companies. In FORTUNE, the researcher was allowed to join any video-conference and teleconference held in the office. Visits were also arranged to FORTUNE's workshop and sites but not every site was visited and observed in PEACE, BATIK and DELIGHT.

Prior to any visit to the companies, a checklist had been prepared beforehand based upon the research questions and objectives which enabled a particular focus to be given to the observation (see Appendix VIII). As Bryman and Bell (2007) note, the observer should be clear about who and what is to be observed. In the checklist, items such as the physical settings that impact on team members' identification, the actions of management in promoting identification, the interactions of team members and their reactions when facing and handling conflicts were listed. As unscheduled discussions with team members might take place in corridors or during lunch breaks, this checklist enabled the research to have a clearer focus of the data that needed to be collected through observation.

One of the objectives of using observation is to identify potential reasons and underlying tensions that give rise to conflict in virtual teams. For instance, in a few of the interviews with team members of Singapore HQ in PEACE, the interviewees indicated that they had been advised by their team leaders and superiors not to show their frustration and negative emotions to their UK colleagues during any conflict. They had been advised to speak to each other and reply to any correspondence in a polite manner and to resolve any conflict collaboratively. During the visit to PEACE's Singapore HQ, the researcher observed the interactions between the virtual team members in their HQ and their colleagues in the UK by listening to their phone conversations. The researcher was able to observe the members' reactions and the ways in which they handled conflicts. For example, the emotions and reactions of an Assistant Trade Manager in Team 2 while facing conflict were identified. The diary note taken is enclosed in Appendix VII.

Likewise, in a teleconferencing meeting of Team 5, the leader waited for 20 minutes and no one turned up. Only two members participated in the discussion, so he was forced to arrange another meeting. As soon as he put down the phone, frustration could be observed and yet he restrained his emotion when talking to the two members. Even when writing an e-mail to those who were absent, asking for an explanation, he had to word it politely. After

the meeting, when the leader was asked why he had to hold back in expressing his emotions, he replied,

*Though I'm the leader, we are of equal rank and most of them have years of experience in this field and they come on board on a voluntary basis... I don't want to lose them* (Engineering Supervisor, Male, aged 41-50, UK branch, FORTUNE)

The point to note is - it is only through observation that the 'darker' side of the reality can be comprehended in real time (Yin, 2003; Gillham, 2000).

Using observation has several limitations. As mentioned above, not every site was visited and observed. Observation sessions were limited to the company visits for the purpose of carrying out interviews. In virtual teams, firstly, full immersion in the daily work of each team was not feasible because of the distributed locations of the fieldwork sites and resource limitations. Secondly, the very process of the researcher's observation of behaviour may change the nature of that behaviour because the participants are conscious of the presence of the researcher and they feel awkward knowing that they are being observed (Saunders et al, 2003). To reduce the negative effect of the observer's presence, Robson's (2002) strategy of minimal interaction was used, whereby the researcher tried to have as little interaction as possible with the participants by sitting in an unobtrusive position in the office and avoiding eye contact with the participants. Thirdly, in some instances while engaging in conversation with the team members, the researcher found that it was impossible to put down everything in writing, so she had to take rough notes after the conversation. These rough notes were useful when she elaborated the detailed descriptions at the end of the day.

Nevertheless, the advantages of observation outweigh its disadvantages. Stories told and information given by the participants during interviews may contain bias and may not entirely reflect the reality. Through observation, team members' behaviour was able to be observed directly. The researcher was able to ascertain the employees' behavioural motives and relate them to their personality traits. Additionally, the events that gave rise to conflict,

their sequence, the attendant processes and emotions involved could be clearly identified at each stage.

#### **5.7.4 Documents**

Documentation such as organisational charts, agendas and minutes of teleconferencing meetings, correspondence, particularly e-mails was gathered. Documentary data is useful in triangulating findings collected using other research methods e.g. observation and interviews and they can be important raw data sources (Saunders et al., 2003).

Due to the geographical dispersion of the virtual team members, one of the ways to gather data is through exploring the members' e-mail communications. According to McCoyd and Kerson (2006), researchers have started to use e-mail as a research tool to collect data, Flicker et al.'s (2004) and Hine's (2000)'s research on online communities and Murray and Sixsmith's (2002) study on health-related issues are early examples of this.

Murray and Sixsmith (2002) note that one of the benefits in using e-mail as a research tool for data collection is that e-mails 'record conversations between the team members and these conversations are 'unsolicited by the researcher'. Furthermore, such tools as e-mails are suitable for studying sensitive issues such as discrimination (Murray and Sixsmith, 2002, pp.47-48). By gathering and analysing e-mails and archives, the researcher was able to identify conflict and behaviours associated with inter-group discrimination. Also, these documents enabled her to trace back events that had occurred before the commencement of the research project.

As McCoyd and Kerson (2006, p.397) note, 'e-mail communication often occurs without the pressures of face-to-face interaction; there seems to be a sense of privacy or safety that allows greater disclosure of intimate and stigmatizing information'. These authors suggest that although communication and physical cues were unavailable when using e-mail, individuals were 'fairly consistent in using symbols and parenthetical, such as colons for tears, smile and frown faces', to express their emotion. It was reported that individuals tended to write down detailed and thoughtful responses (McCoyd and Kerson, 2006, pp.395-401).

As most virtual team members rely heavily on e-mail for daily work interactions in the current study, analysing the texts and contents of such e-mails enabled the researcher to understand the members' discussions of work, subjects of interest and the ways they exchange information and socialise with one another via the electronic device. Like other types of documents such as diaries and letters, e-mails provide a potential rich source of data on virtual team members and teams. Gathering and analysing such e-mails assisted the researcher in identifying sensitive issues and members' emotions during conflicts.

In FORTUNE, e-mails covering a period of seven months were collected. Similarly, e-mails dealing with the quarterly GHR bulletin in DELIGHT were obtained. As for PEACE and BATIK, the managements in both companies initially were reluctant to provide printed copies of e-mails as they contained confidential information such as freight charges, rates for shipping and information about the clients. After explaining how the e-mails would be used, the managements agreed to provide copies of those relating to conflict issues mentioned by the informants during the interviews. In the end, not only those e-mails containing tensions and conflicts were obtained, but also e-mails that showed how conflicts were resolved in the virtual teams.

## **5.8 Analysis of Interviews**

The interviews were transcribed verbatim and along with company documents, e-mails and observations were then coded, categorised and analysed. A thematic qualitative analysis was adopted to make sense of the data, in which explanations that were given by employees during the interviews were matched to different themes. Each part of this analysis was driven by pre-existing theory, reflecting the theoretical context of the research.

It took several months to complete the transcription for thirty-eight interview sessions. The data was then sorted into manageable sections according to categories and themes based on the research objectives and questions. King's (1998) template analysis was used in the analysis stage. Template analysis involves categorizing and utilising data to identify and explore themes, patterns and relationships (Saunders et al., 2003). A template basically contains a list of categories that represent the themes revealed in the data. These categories

were pre-determined by the existing literature and theory before data collection and were then amended and added to as data were analysed.

Categorical data allows classification. The process was followed by sorting and classifying the data under the same topics and headings. An organised gathering of information facilitates drawing conclusions and taking action. Information was subsequently displayed in the form of figures, tables and charts. Relevant bits of the data were then distributed into the appropriate categories. The units of data from the transcripts were transferred to a new document and matched with the relevant categories, using the copy-paste function of Microsoft Word. An analysis table was subsequently produced containing all relevant quotes which were categorised under headings. The researcher then compared the data, key themes and patterns of relationships. Through this comparative analysis, explanation and prediction can then be approached (Rantala and Hellstrom, 2001).

Through the multiple case-study approach, a logical chain of evidence for the relationships studied can be built. A cross-case analytical framework allows the researcher to evaluate the members' relative behaviour and performance across different virtual teams. Similarities and/or differences in notable outcomes or attributes, together with their contributory factors were identified. Further, cross-examination of teams with similar profiles but different social settings allowed for diverse ways of conceptualising and operating future plans. This can be achieved by extracting the lessons learned from the different contexts and examining their applicability to a given context. Although all the teams were characterised by different industries, sectors, social and cultural settings, there were certain aspects that were comparable and offered a valuable source of evidence and lessons. For example, the diversity demonstrated in the determinants of identification helped to create an effective knowledge base for companies when promoting identity in teams from a diverse composition of the workforce.

When comparing cases, data that had common traits regardless of cases was compared (Miles and Huberman, 1994). Common traits could be the biographical traits or demographical characteristics of the employees such as gender, educational background, age and work experience. This cross-cluster analysis is particularly useful for answering



certain research questions, e.g. when the researcher wanted to identify the social groups that employees used to categorise themselves.

This research presents two levels of case analysis, i.e. the team-based level and the organisational level. The seven cases were first analysed, followed by ‘zooming out’ the focus onto the organisations to capture a larger picture. The next step involved drawing conclusions and verifying the data to develop meaning. This took place during the data transformation process, as data was merged, clustered, sorted and linked together to derive patterns and themes (Yin, 2003). The final phase was to re-conceptualise or develop new ideas consistent with the theory, through comparison with the theoretical framework and to identify opportunities for replicating the research findings (Miles and Huberman, 1994). Again, the research process (which serves as the analytical strategy in the current research) was used iteratively when reconciling evidence across cases and literatures. It also serves as an audit trail, demonstrating to the reader how decisions were made and conclusions reached in the conduct of a research study (Speziale and Carpenter, 2007).

### **5.8.1 Analysis of E-mails and Observation Data**

Content analysis can be described as a ‘research technique for making replicable and valid inferences from the text to the contexts of their use. This type of analysis provides new insights and increases researchers’ understanding of particular phenomena or informs practical actions (Krippendorff, 1980, p.18). Content analysis is any technique for making inferences by objectively and systematically identifying specified characteristics of messages (Holsti, 1969; p.14). Therefore, content analysis is applicable to many different forms of unstructured information such as transcripts of semi- and unstructured interviews (Bryman and Burgess, 1994) and even qualitative case studies in organisations (e.g. Hodson, 1996).

As virtual team members rely primarily on e-mails to communicate, a content analysis of their e-mails enabled the researcher to determine the nature of any conflict occurring within virtual teams through detecting reactions, expressions and emotions displayed in their e-mails when members were facing and handling such conflict. E-mails were collected and

studied in order to understand the process of any conflict occurring within virtual teams, the causes of that conflict and the ways members handled and resolved it.

Coding was used in the process of doing the analysis of content for e-mails and the observation data. As Bryman and Bell (2007) suggest, there are two main elements to a content analysis coding scheme: designing a coding schedule and designing a coding manual. Categories used for coding can be derived from several sources: they can be based on the existing theory and literature, and extracted from the collected data in the current research (Saunders et al., 2003).

The coding manual was first compiled, when specified categories that were to be used to classify the text are based on a set of written rules that define how the text will be classified were identified and defined. This coding manual enabled message content to be coded in a consistent manner. For example, in the current study, categories such as the team, the gender, the position of virtual team members, their years of experience working within the team, the causes of conflict, the reactions of the members when facing conflict and the ways they handle the conflict, are listed in the coding manual in order to describe the team members who are experiencing conflict and to define the nature of the conflict. The coding schedule, however, is a form into which all the data relating to an item being coded is being entered. Examples of the coding manual and coding schedules for analysing conflicts which have occurred in virtual teams, and the ways in which members handle the conflicts are presented in Appendix IX, X, XI, XII. Appendix IX represents the coding manual for conflict in virtual teams. Appendix X and Appendix XI are examples of coding schedules for conflict in Team 1 and Team 6, extracted from e-mails. Appendix XII is an example of a coding schedule for conflict in Team 2, derived from the observation data.

There are generally three approaches to qualitative content analysis i.e. the conventional, directed and summative approach (Hsieh and Shannon, 2005) and each has its usage and steps in analysing text. In Hsieh and Shannon's (2005) review of the approaches to such analysis, they note that the conventional approach is adopted when the existing theory or literature describing a particular phenomenon is limited and there is no pre-determined category or code to depend on prior to the analysis. Categories or codes emerge and are developed during the process of analysing the text. The directed content analysis

(sometimes referred to as deductive analysis), on the other hand, is guided by a more controlled process whereby key concepts and variables are first developed using existing theory. A set of pre-determined categories or codes are developed after the formation of research questions but prior to the text analysis. Finally, the summative content analysis begins with searches and counts of frequencies for occurrences of the identified words. Subsequently, the word usage and the range of meanings that a word can be used are explored (Hsieh and Shannon, 2005, p.1279-1285).

The procedure of directive content analysis was followed in the current study for the analysis of content of the e-mails collected from the fieldwork. The data analysis began with the researcher identifying a set of variables or codes, using existing theories of conflict. For instance, in examining the causes of conflict within virtual teams, a set of categories representing possible causes e.g. misinterpretation, miscommunication, delay in communication, and differences in working approach and goal were identified. Likewise, the virtual team members' reaction to conflict was determined using Rahim (1983) who established five conflict handling styles i.e. the avoidance, accommodation, collaboration, competition and compromise. Then the researcher carefully reviewed all the e-mails gathered during the fieldwork, highlighting text that described the reaction of virtual team members to conflict. An attempt was then made to code all highlighted text, following closely the existing stipulated categories (See Appendix IX). However, text that could not be coded into those pre-determined categories, for instance, potential cause of conflict, were identified, to be re-examined and grouped under another new category or sub-category. Again, the researcher often move back and forward comparing the data and existing theory to allow for new insight emerging from the data. Within a feedback loop the categories or codes were then revised, eventually reduced to main categories and verified in relation to their reliability. In addition, it was found that the existing theory could be confirmed and extended.

Bryman and Bell (2007) note that there are several potential pitfalls in designing a content analysis coding scheme, for example, overlapping of the categories may occur and coders need to be clear about how to interpret items and to take note of their causing factors when assigning a code to each category. At times, coders may not be consistent and may vary depending on the type of content that is being analysed (Bryman and Bell, 2007, pp.315-

316). Prior to the main study, sample of several students' e-mails containing conflicts was analysed and the categories which formed the basis for the analysis of conflict and members' handling behaviours in the current study were tested.

## **5.9 Limitations and Conclusions**

This chapter has developed and justified the methodology adopted for the current research. The philosophical position of Critical Realism and the qualitative approach, more specifically the case study method, is discussed and deemed to be appropriate for studying the formation of identity and its impact on conflict in virtual teams. The ontological position of Critical Realism acknowledges the role of both structure and agency in identity formation, thus confirming one of the beliefs central to this research – that the 'emergence of the virtual team members' social selves is something that occurs at the interface of structure and agency' whereby both the organisational context and structures; and the thought processes and pre-conception of these members affect the construction and development of their identity within the teams (Archer, 2002, p.17).

Kenyon-Rouvinez (2001, p.179) noted that the weaknesses of a case study research include 'lack of robustness, little basis for generalisation, and lack of clarity'. To overcome such weaknesses in this study, the multiple case study method was adopted and a similar structure of analysis was applied across the seven cases, with the use of multilevel analysis and concise write-ups. With the substantial amount of narrative in the case study approach, the theory of identity and collective behaviour in virtual teams could thus be developed into significant themes.

As theory building is defined as 'the process of modelling real-world phenomena' (Torraco, 1997, p.123), Dooley (2002) argued that case study research has a 'unique contribution to understanding real-world phenomena in the context of the case'. A case study constructs a story that gives realistic accounts of the world within which virtual team members experience life and how they develop and maintain their identities. These stories demonstrate how these members make sense of themselves and their teams and how the identification process consequently affects their behaviour. In brief, the case study approach constitutes three parts of this research: a theoretical framework that provides a

way of examining the formation and impact of identity within virtual teams, a contextual analysis incorporating the contextual and situational factors, and an empirical study including fieldwork, analysis and discussion (Dooley, 2002, p.346).

To overcome the problem of 'lack of objectivity' that qualitative analysis can cause, consideration was given to the 'definition of the research questions and the unit of analysis' (Kenyon-Rouvinez, 2001, p.179). At every stage, the researcher made a wide range of decisions as well as considering and discussing the methodological considerations linked to these decisions. Attention was directed towards connecting and contrasting the data obtained to existing theories. Such a logical linking process involved constantly moving forward and backward among the data and theories. In so doing, it provided room for the theory building opportunities and necessary adjustment of methods. Overall, the adoption of appropriate techniques and methods throughout the analysis demonstrated evidence of critical analysis and appraisal to increase validity and reliability. Crucially, an insight into the formation and impact of identity on virtual teams was successfully sought. The empirical findings are presented in the following chapter.

## **CHAPTER SIX: AN ANALYSIS OF IDENTIFICATION PROCESSES IN VIRTUAL TEAMS AND THEIR IMPACT ON CONFLICT WITHIN THE TEAMS**

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### **6.1 Introduction**

Drawing from the qualitative data that has emerged from the interviews and observations conducted in seven virtual teams operating within four companies, this research uncovers and explores the identification processes and the impact of such processes on conflict. In particular, the study first examines the factors that motivate employees to identify with their team and secondly, it examines the effect of these identification processes on employees' inter-group and conflict handling behaviour. The rest of the chapter is organised as followed. Firstly, the psychological processes of how employees identify themselves with the teams are described. In particular, how the classification of oneself in a team enables an employee to locate or define him or herself in the team environment is discussed. Secondly, the factors that motivate members to identify with their team are presented in the light of the context and the characteristics of virtual teams, followed by the identification of the types of conflicts that occur in those teams. Thirdly, the identity threat faced by the employees when conflict occurred is reported. Fourthly, the responses and reactions of employees to identity threat are identified. In particular, the factors that influence group members' strategies for re-gaining or enhancing their self-image are specified. Finally, this is followed by an analysis of the impact of such strategies on employees' inter-group and conflict handling behaviour within their teams.

### **6.2 Identification Processes and Self-conception of Virtual Employees**

In addressing the research question of how employees identify themselves with virtual teams, the findings reveal that when the employees identify themselves, they cognitively define and perceive the attributes of their team in the form of stereotypes based on characteristics that are indispensable to their organisation and their place in an institutional environment. Thus, characteristics of the teams may be shaped by the surrounding institutions which, of course differ from one another in their regulatory, cognitive and normative aspects (Kostova, 1999).

The findings reveal that all of the employees in this study referred to themselves in terms of their relationship to a collective such as their membership in virtual teams or larger organisations. For example:

*I am E, the Lead Metallurgist for the Core Technology Group here in Houston (Lead Metallurgist, Male, aged 31-40, Houston branch, FORTUNE)*

*I am R, the general manager of PEACE (the London branch) and we are a shipping company ranking in the top 20 in the world (General Manager, Male, aged 51-60, UK branch, PEACE)*

*I am the trade manager of the Far East Service and how we relate to PEACE, in the UK is that they are the original office and we are the HQ... We have the regional office in charge of the eastbound pricing as well... (Trade Manager, Male, aged 31-40, HQ, PEACE)*

This shows that regardless of whether employees are aware of the integration of self and the collective, they frequently define themselves in relation to their team, department, local branch or organisation by using the notion of ‘we’ and ‘us’ instead of ‘I’. Therefore, this perception of belonging to teams is either explicit or implicit. Most of the respondents have either consciously or subconsciously internalised the team or organisational identity as a self-referential description that provide answers to the questions ‘Who am I?’ or ‘Who are we?’.

From the findings, employees in virtual teams often categorise themselves and others on the basis of varied salient perceptual dimensions that involve cognitive self categorisation. Although most employees in PEACE and BATIK have neither met one another in person, nor have they had much social interaction outside of work, they do identify with each other. As some employees indicated:

*I can work well with people from the local office and the virtual team. I can see myself as a member in both teams. There is no difference... With the*

*globalisation thing, you can't escape working with people from other countries and of course, using the communication technologies. Most importantly, we have to manage the communication well in virtual teams* (Marketing Executive, Male, aged 21-30, UK branch, PEACE)

*I find that although we have not met, our interaction is very straightforward... If the team is able to generate profit... this reason is enough to keep me going... I show the same attitude working in virtual teams as in the local office. To me, I can see myself working in both teams as long as we work together to achieve the group goal* (Division Manager, Female, aged 31-40, Singapore branch, BATIK)

Clearly, the attributes that formulate employees' use in the process of identification are based on defining and stereotyping personal attributes that relate to the teams, their role within the teams and to other team members. In the workplace, most employees define themselves according to their role in the team, which in turn provides employees with a sense of themselves as persons. Some employees indicate that by simply engaging in a job that is perceived to be distinctive and special enhances their self-image:

*I am a sales person and I love to work in the sales team. I love being what I am... it makes me feel good and satisfied when I am able to close a deal each time.* (Senior Sales and Marketing Executive, Female, aged 31-40, UK branch, PEACE)

A male Welding Specialist (aged 41-50) in FORTUNE felt proud of belonging to the team because he could participate in a global project, which gave him a sense of achievement. As attributes that drive employees to identification processes are central and distinctive to the employees, recognition by the organisations of employees' needs and other expectations for such identification is essential. The following sections discuss factors which are likely to motivate employees to identify with teams, and thus are of direct relevance to organisations.



### 6.3 Individuals' Needs as Driving Factors to Identification

It was found that team members' identity is determined by the individual needs, particularly identity, goal or achievement-related and affiliation-related needs. These needs are drivers of identification if they can be met by teams. The results reveal that an employee can be driven by more than one need at a time. As an employee commented:

*I am happy and feel proud with PEACE as now, people like to work for us – they like to work for our ships. This is the comment from the external people (our clients). They love to go on the ships. I have a good team now... Some of the divisional heads, they give us ample support so we can drive things... To me, I get my salary from the company and I have to show my loyalty.*  
(Fleet Division Manager, Male, aged 31-40, HQ, PEACE)

Out of the thirty-eight informants, twenty noted that they identified best with the team when they gained positive self-conception; all reported that they identified with the team when their goal or achievement-related need was fulfilled through financial rewards and self-improvement opportunities, and sixteen indicated that they identified with the team due to the fulfilment of their affiliation-related need through interacting with people. Indeed, most employees who are driven by the affiliation-related need are from Teams 2 and 3 because the former is the Sales and Marketing team and the latter is the Customer Service team in both of which most of their members enjoy social interaction with other team members.

The majority of employees in Teams 2, 4, 5 and 7 identified best with the team when they gained positive self-conception. This in turn, depended on how they perceived themselves, how others perceived them as individuals or as a team and how much the employees valued themselves:

*Basically, I can identify with the team (virtual teams on ships) because the team identifies with us.* (Fleet Division Manager, Male, aged 51-60, UK branch, PEACE)

A female Senior Sales and Marketing Executive (aged 31-40) in the UK branch of PEACE who has been working for seven years in the same company noted that she identified with the company because 'I like people giving me freedom and trusting me that I will perform my job'. For her, knowing that she is trusted by others gives her a sense of achievement and perception of belongingness. Sometimes, self and social image can be enhanced by group members simply by being part of a team that is perceived to be distinctive. Members feel good when achieving the group goal and they are proud of being a team player. This perceived team distinctiveness serves as a positive differentiation as it distinguishes the members' team from the others and provides a unique identity for them. The positive self-image will, in the end, lead to collective behaviour. As an employee put it:

*Virtual teamwork is a professional way of getting things done. By dealing with people from abroad, I tend to behave better because I want to project a better image of myself and the company* (HR Executive, Female, aged 31-40, Kuala Lumpur branch, DELIGHT)

Being a team member also benefits individuals by helping them achieve personal goals such as self-improvement, financial gain and a sense of security, as well as a group goal like achieving time and cost saving for the team. Although employees acknowledge the benefits that virtual teams have brought to the organisation, their identification is still driven by their personal goal/achievement-related needs. The data from the current research shows that the majority of members in the seven teams associated this need more with their own goals and interests than those of their respective organisations. Employees indicated that they identify with the team in order to achieve financial gain and a sense of security:

*I am paid to do it; I have to work with any team that they give me. Definitely I can see myself working in the virtual teams. I don't care about the differences that much... I work and I get paid.* (Deputy Operational Manager, Male, aged 30-40, HQ, PEACE)

*I think for business which is depending on the agent team, this kind of operation is good and beneficial... For me, I think I can identify with the team as I identify with PEACE. In shipping, you have to depend on agents*

*all the time... they are our ears and eyes; we need them to make money. You have to accept and identify with the agents...* (Trade Executive, Male, aged 21-30, HQ, PEACE)

On the other hand, most employees in Teams 1 to 7 identify with the team for self-improvement and career advancement. Virtual teamwork was viewed as an opportunity for learning and developing their personal skills and knowledge. In PEACE, an employee in the HQ noted that she has been engaged in virtual teamwork for nine years and there was no problem in identifying with the team because:

*When interacting with people from overseas, I get to know their culture, working style and the experience gained broadens my knowledge. Also, I get a chance to meet up with the members once in a while so to me, it is quite an eye opening experience... I can identify with virtual teams and team in the HQ* (Deputy Trade manager, Female, aged 31-40, HQ, PEACE)

The initial assumption was that identification with virtual teams is made possible if individuals' affiliation-related needs can be fulfilled. Although employees are isolated by geographical distance, many acknowledge the benefit of a friendly atmosphere and relationship-building within the virtual teams, which is achieved via communication using the communication technologies. For them, maintaining a good working relationship with other colleagues can be beneficial both to themselves as individuals and to the team as a whole.

From the results, affiliation-related needs appear to be more important to those whose job functions require a substantial amount of social interaction and customer facing activity, such as those required of sales and customer services teams. For example, in PEACE, employees in Teams 2 and 3, who are involved in sales and customers services, tend to seek closer bonds with their team mates. Two employees in Team 2 (both aged 31- 40) indicated that they enjoy social interaction and identify better with colleagues who communicate like family members. Furthermore, most employees interviewed (60%) indicated that social interaction is necessary to their job and closer bonds with their colleagues were sought. Apart from the sales and customer service teams, 50% of the employees in Team 5 in

FORTUNE were also driven by this need. These employees were from Brazil and they indicated that in their country, building a close relationship in the workplace is essential:

*We, Brazilians, we are different from European; we are more open... In Brazil, we have friends at work. Things get done more easily if you build friendships with people at work. (Engineering manager, Female, aged 41-50, Brazil branch, FORTUNE)*

Likewise, people from the Asian countries - China and Singapore - were also influenced by the culturally accepted practice of forming good relationship at work. For example, people with a Chinese cultural background tended to emphasise good relationships at work in order to facilitate work processes. An observation of an employee indicated his interaction with his colleagues from China:

*In Shanghai, you got to learn a lot more about their culture. People there are very different from people in the West. In China, it is more of relationship. You will find difficulties to get things done if you don't have good relationships with people. They called it 'guan xi' in Chinese... you need to establish a bond with people. You have to entertain people.... make sure that you spent time reading their languages, meaning and their body language. Sometimes there are things they want to tell you but not via a formal channel. (Assistant Trade Manager, Male, 31-40, HQ, PEACE)*

Most employees in Teams 2 and 3 who are from Singapore could identify with the teams because of the rapport and relationships they developed with their colleagues. When a female Trade Executive (aged 21-30) in the HQ was asked about the reasons for working in PEACE, she replied:

*It's the environment, the colleagues... My colleagues and I here in the local office, we are more like friends and we help each other up (Trade Executive, Female, aged 21-30, HQ, PEACE).*

Another PEACE Deputy Trade Manager (Female, aged 31-40) noted that ‘for Asians, having a good boss and good relationships with people is more important... Imagine if I don’t like the person and our approach in working simply cannot fit, I find it very torturing and this is not good in the long run...’

In general, evidence suggests that identity formation in virtual teams is influenced by the group-based, role-based and personal factors in the social context. Self-esteem or self-enhancement needs become member determinants in identification and these needs can be fulfilled through positive self and social image. Members are also motivated to identify with the group if their goal/achievement-related needs can be met. Affiliation-related needs appear to be a greater influence for employees whose job requires social interaction and public relations (e.g. sales, personnel) and people from countries that emphasise and enjoy interdependent relationships at work (e.g. China, Singapore and Brazil).

### **6.3.1 Need to Reduce Uncertainty in Virtual Teams**

Initially this research did not intend to examine co-located teams. However, since all the participants in the study were engaged in both virtual and co-located teams, it was thought appropriate to gather data about this topic. Compared with co-located teams, many employees indicated that they did not identify at all, or identified less, with their virtual team. This is because being physically dispersed in different locations led to uncertainty or a lack of clarity in terms of coordination and monitoring the teams’ performance. An employee, who was also a team leader, highlighted the difficulty in monitoring the project due to the physical distance from her colleagues. She noted:

*In the same office... If I don’t get what I want, I will walk over to talk with them... whereas with the virtual employees, you have to push them by e-mail. When the internet service is down, you have to fax it over... When they are busy or not around, it’s hard to get hold of them. However, with those in the same office, I can see them physically; I can see they are working on it now... For virtual team workers, there is lack of clarity. Unless they take the initiative or genuinely report to me, I won’t know whether they are*

*progressing.* (Personal Assistant, Female, aged 31-40, Kuantan branch, DELIGHT)

Thus, when group boundaries are vague and there are insufficient cues to promote team identity, the shared context available in a co-located team tends to re-inforce a deeper or stronger sense of membership than in a virtual team. Some employees found that because virtual teamwork is invisible to an outsider, it is difficult to achieve self-enhancement through positive social image:

*There is a lot more to offer in the way of informal interactions and corridor chats... I just wanted to run this past you... I heard so and so talking about something that is related to your project... Also, co-located teams are more visible to outsiders. If you see the same group in the office... you're bound to ask 'what's going on there?' This is how the work of the group is communicated informally. Virtual teams are literally and metaphorically invisible.* (Engineering Supervisor, Male, aged 41-50, UK branch, FORTUNE)

The results show that the need to reduce uncertainty and lack of clarity in virtual teams is great as most employees are searching for something in common among the members upon which to use as a base for shared identity. The result is that employees refer to themselves on the basis of the functions of their teams rather than demographic characteristics. Many indicated that their identification in a team lies in the commonality of values and experience enjoyed in the community of practice (CoP), rather than in their nationality, gender or age.

Shared values have a significant impact on determining whether employees identify with a team, especially the employees in Teams 1, 3, 5, 6 and 7. Most of them indicated a strong desire to work with people with similar values, who share a common task, goal and mission. In teams, values reflect the meaning or purpose of the team and goals are set in tune to achieve that meaning. Hence, a shared goal often drives employees to identify with each other even if they are at different sites or come from diverse backgrounds. In PEACE, a shared goal promotes team identity because employees feel that they are in the same boat,

sharing a common destiny. When an employee was asked if she sees herself differently working in a virtual or a co-located team, she noted:

*We are all working for PEACE under a big umbrella... the HQ and the London office; we definitely have different ways of doing things... However, we serve one purpose... When thing goes wrong, we cannot always say this is a Singapore problem... If PEACE is in trouble, our branch will be affected... For the same purpose, we are here to work. Within that framework, we actually found the common ground where everybody gets on... (Customer Service Manager, Female, aged 31-40, UK branch, PEACE)*

Having similar values and goals creates mutual interdependence among the team members and consequently provides a sense of unity:

*With the mission and goal in the team, we just work towards that and all other problems that come along will be toned down for the sake of accomplishing the bigger picture. (HR manager, Female, 41-50, Melaka branch, DELIGHT)*

Furthermore, virtual teamwork enables the pooling of resources and expertise from different parts of the world to work together on a project. From the findings, some employees identified with the teams because they enjoyed working with others who had many years of experience. Such a reaction is governed by the self-enhancement motive because within the engineering field and energy sector, people value those who have worked in the field or sector for a long period and believe them to have greater knowledge and skill.

Indeed, all of the participants of FORTUNE expressed higher regard for and closer identification with team members who possessed significant years of experience. They addressed these people as ‘the expert’ and felt proud to work with them. When the manager of the engineering department (female, aged 41-50) in the Brazilian branch of FORTUNE was asked about her role in the project, she found that working with experienced people in the group concerning the induction bending clad pipe excited her: ‘It was interesting to

have people with a great deal of experience coming together, working on the issue and learning from each other', she said. Another FORTUNE employee noted that his reason for taking part in the project was because of others' experience in clad bending:

*I am interested to know what other guys are doing so I inserted myself into the team... I have a lot of discussion with F on how to do clad bending... I guess the reason why I engaged with her is because the guys from Norway and Scotland don't really have experience in this... They are more concerned with duplex. (Lead metallurgist, Male, aged 31-40, Houston branch, FORTUNE)*

People from the energy sectors who are involved in technical work seem to value members with substantial experience and gain a positive self and social image when working with them. On the other hand, those who possess extensive years of experience tend to feel valued if they are asked for their expertise. When a FORTUNE engineer with more than 15 years of experience in the field was asked if he enjoyed working in the team, he responded:

*Absolutely! I feel great when we get a problem sorted and come out with a new idea. These people that I work with, they are all specialists and have years of experience in the oil and gas industry. It is fascinating when we all learn from each other (Engineering Supervisor, Male, aged 41-50, UK branch, FORTUNE)*

Indeed, what is valued most is the ability to contribute to and share knowledge with others in the industry. For instance, the welding engineers of Team 5 were linked with other welding engineers across the world by an informal network or forum where problems were discussed, ideas were generated and tips were exchanged. These engineers showed concern over these problems and an appreciation for the opportunity to share within the network as they had an ultimate desire to improve their professions and the industry in which they worked. To these engineers, virtual teamwork is a way to share knowledge and solve problems at work.



In FORTUNE, the initial interaction among the employees took place at a global weld council where representatives from Brazil, the USA, Norway and the UK met together. This was a large FORTUNE Research and Development conference and it was held every quarter. One item on the agenda was the induction bending clad pipe project. As they started looking at a global level, they discovered that plants in four different countries were working on the problem, but that each had a different way of approaching the project. There was huge interest in finding out the cause of the problem and finding a global solution.

Knowledge sharing on the induction bending was made possible on the forum for this project. An e-mail dated 16/11/2005 received by the team leader from his local colleague states:

*I just skimmed the web recently on induction bending and came across this presentation by V G Norway, which you may find interesting. May be worthwhile contacting these people if possible to discuss some of the issues contained within?*

Upon receiving such information, the team leader then passed around the presentation by V G Norway to his virtual colleagues within the team, explaining the reasons behind cracking of overlaid pipes during induction bending.

Despite the fact that this project was not initiated by the top management but by the desire of the team to solve a problem, some team members found that they had no problem in identifying with the team. As an employee noted:

*We respect each other because you learn when working with people with many years of experience. Of course, it doesn't mean that I need to agree with 100% of everything... We are just comparing our differences to achieve a global specification... People won't think themselves better than others... we don't have this type of spirit. We have differences... but we listen to each other. (Welding Engineer, Male, aged 41-50, Brazil branch, FORTUNE)*

Likewise, a male Lead Metallurgist (aged 31-40) in the same company indicated that his reason for participating in the project was to tap into others' experience and share his own professional knowledge. Overall, individuals can be driven to identify with virtual teams by their need for identity, goal/achievement, affiliation, and the need to reduce uncertainty faced in the teams. To reduce uncertainty, employees seek to create a group based on similar values, cultural background, and experience. Although the earlier assumption was that people would identify better with members of a similar demographic background, the results have suggested otherwise - employees from different demographic group can still identify with each other if they share common values. Identification with the team is made possible when individuals have the desire to bring improvement to a profession or a field.

### **6.3.2 Fulfilment of Virtual Team Members' Needs and Expectations**

The identification process depends on the 'given' contextual factors that permit social comparison and social categorisation. The earlier assumption that demographic, cultural and geographical diversity within a team can be problematic for the creation of virtual team identification and a sense of security is now looked into in detail. In this section, the impact of diversity in terms of social category, culture and locations for identification is discussed.

From the findings, diversity of values (i.e. the differences between what team members believe the group's task, goal, target or mission should be) has a significant impact on identification processes. The majority of members in Teams 1 (Pricing), 2 (Sales and Marketing team), 3 (the Customer Service team) and 4 (Fleet Management team) and Team 5 (the IVE group) faced difficulty in identifying with the team due to a diversity of values. Out of the total of twenty-eight participants, eight reported that differences in values prevented them from identifying with the team. Furthermore, seventeen participants indicated that differences in values often led to conflict within the team. In PEACE, employees from the East are representatives of the Head Office (HQ) and those from the West are from the UK branch. Both locations have different interests – HQ looks after the interests of the company as a whole, taking into account concern for all other branches whereas the UK branch focuses only on European trade. As one employee noted:

*The branch doesn't want to see the big picture...They don't understand the stand of HQ. I find that differences in interests of the HQ and the branch create the concept of 'us' and 'them.* (Deputy Operational Manager, Male, aged 31-40, HQ, PEACE)

Likewise, employees in FORTUNE were employed to work for the local offices in the UK, the USA and Brazil. Although they were working towards the same goal, developing an agreement about the standardised global specification, each representative had to propose his or her concern for the applications in the local context before the agreement could be finalised. Conflicting viewpoints and interests often arise when it comes to negotiations, thus affecting members' identification with their virtual team. For example, although teams in Houston and Brazil were working towards the same goal and were willing to work together, employees found it difficult to come to an agreement.

From the observation data gathered from most of the teleconference meetings held in FORTUNE, team members often found it difficult to come to consensus owing to differences in their interests of different plants. For instance, in a discussion about whether the four plants (UK, US, Brazil and Norway) were ready for a single global standard and supplier, team members expressed their different interests and preferences in using a particular material for producing pipe. This led to the same issue being repeated and discussed in the subsequent meetings and as a result, the decision making process was prolonged.

Similarly, in BATIK, the representative of the Malaysia office noted that she identified better with colleagues from the Myanmar office than with those from Singapore because:

*With people from Myanmar, we have common bosses and work towards the same goals. For the company in Singapore, they are outsiders (the insurance agent) and they always look after their own interests and goals.* (Account and Admin Executive, Female, aged 31-40, Malaysia branch, BATIK)

The results demonstrated that demographic characteristics (e.g. nationality, gender and age) had insignificant impact on employee identification with virtual teams. Out of the thirty-

eight participants, none of the participants' group identity was influenced by their similarity in nationality or age with other members. However, in the multinational companies PEACE and FORTUNE, multiple identities appear in the teams due to employee distribution in different locations. Employees' identification is often influenced by the local institutional environment which is shaped by factors such as the laws and regulations of the country in which they are operating as well as the social values and norms of the locality. Therefore, employees may possess distinct identities in relation to the local office, the virtual team and the organisation. When an employee in PEACE was asked if he identified with his team, he replied:

*Virtual vs. co-located team, I definitely identify better with the co-located team because we are from the same office. I can consider myself as part of the local team better and this is normal. Even working in virtual team, at the end of the day, I feel that I am from Singapore, you are from the UK and she is from Amsterdam... In terms of identity, I feel that I am from the Singapore side although we are all part of PEACE (Trade Manager, Male, aged 31-40, HQ, PEACE)*

The results show no direct evidence that employees feel more connected to co-workers of the same gender. However, when a PEACE's female employee was asked if the working relationship and social interaction with colleagues influenced her identification, she responded:

*To me, it depends on who I am talking to. If I am talking to ladies, I may touch on things outside work, but to men, I don't know... It also depends on my age group or the other person's age group for us to relate better to each other (Trade Deputy Manager, Female, aged 31-40, HQ, PEACE)*

When she was further asked to compare and describe her identity in the team, she commented:

*I am closer with people from the China office. Being Chinese, it does help... we tend to talk more to our colleagues from the Chinese office. So, the more*

*interaction you have, the better you can relate to them and work together as a team* (Trade Deputy Manager, Female, aged 31-40, HQ, PEACE)

Gender and nationality may have an indirect impact on employees' identity as these factors influence social interaction and working relationships which subsequently affect employees' identification. However, such an influence was found insignificant in virtual teams when compared to the influence of cultural diversity.

### **6.3.3 Effect of Cultural Diversity on Identification**

Most employees in PEACE, BATIK and DELIGHT (but not FORTUNE) acknowledged the negative effects that working cultural differences could bring to virtual teams. Many employees of Teams 1 and 2 indicated that working culture differences often prevented them from identifying with the teams:

*Because of the cultural differences and because they are all from the Far East, it is hard to consider myself as part of them.* (Customer Service Executive, Male, aged 21-30, UK branch, PEACE)

The differences in Western and Eastern working cultures on employees' identification is substantial, particularly in PEACE where a large gap and bias are found among the members. When an employee was asked if different nationality and culture affected his identity, he replied:

*No! I won't see colleagues from other branches as 'them' because of difference in nationality. In fact, nationality and race is not a big issue here. I think it is the differences in working procedures...* (Trade executive, Male, aged 31-40, HQ, PEACE)

However, employees often find it difficult to adapt to culturally unfamiliar behaviour, attitudes and working practices. Failure to reach agreements within teams often prevents members from identifying with their teams and difference in working cultures can lead to 'unhealthy' racial and national stereotypes. An Indian employee (who is a Singaporean) in

PEACE's HQ who faced problem in working with people from the UK branch illustrated his experience in the team:

*Working with people from the UK, we face problem in communication. They are not following rules and procedures. For ship planners, following a set of procedures is important. They often change things without notifying us. If problems occur after two/three weeks, I would highlight their shortcoming in two lines but they would come back with twenty lines... Maybe this is a cultural problem...*

*It's easier to deal with people from China... they are more proactive. Although they don't understand English well, they always try to do the job properly. Whenever we explain things to them, they will follow. Here in the UK, they normally come back and tell us that they refuse to do it and give 20 reasons for not doing it... My impression is that UK people are laidback... so I have bad impression towards them... They want to be in control but they take things easily...*

*I work with many virtual teams... I can work with people from the UK but it is hard to consider I am part of team. (Ship Planner, Male, aged 31-40, the HQ, PEACE)*

Likewise, in the UK branch, an employee described the differences in working cultures which cause problems:

*We use e-mails all the time... With the global network, we normally get a reply from all the countries except Africa. So, this is a cultural thing... They take things and respond a bit slower. We all know that places in West Africa like Lagos, Ghana and South Africa, they have been fantastic! Even Spain and Mediterranean countries have different attitude. They are not acting as fast as the Asian working mentality... When Asians want some things... they want an immediate answer. It doesn't work like that (Senior Sales Marketing Executive, Female, aged 31-40, the UK branch, PEACE)*

A European Trade Manager (female, aged 31-40) in the UK branch felt exasperated when dealing with colleagues in Singapore as she was expected to respond immediately. She found it hard to cope as this is not how people work in the UK. She believes that her colleagues in Singapore should give her at least one week to respond.

In the e-mail dated 09/09/2006 sent to her Singapore colleague, she wrote:

*We have mentioned before many times that we get a lack of notice for tenders, i.e. only three working days given to LON before the deadline for two tenders recently, when we have repeated stated that we need one week, unless these are small items in which case we can reply sooner... if the tender is received well in advance by our Singapore colleagues, then this should be sent to us in good time. If deadlines are missed because of short notice, the bonus is surely on the receiving party who might have sent the tender earlier. We have to be clear of this point as it has repercussions on our deadlines...* (European Trade Manager, Female, aged 31-40, the UK branch, PEACE)

Four days after this e-mail was sent to that colleague, she found that the work situation was not improved so she sent another e-mail (dated 13/09/2006) as a reminder:

*As discussed, we are receiving tenders at short notice, and as such these deadlines are not always feasible. We reiterate that in order to avoid disappointment, one week's notice should be given for a sizeable tender. Anything less is taking a risk on the deadline...* (European Trade Manager, Female, aged 31-40, the UK branch, PEACE)

Different approaches to communication, especially different ways of writing e-mails, often lead to conflict and influences employees' identification processes. This was particularly seen in Team 2 and 3. In PEACE, employees who originated from the Far East believed that their Western colleagues were too straightforward, saying that e-mails sent by Westerners contained too much sarcasm and were rude. These perceptions not only caused conflicts, but also influenced the ways in which conflicts were handled:

*They will ask you 'why' directly and e-mails are written in a sarcastic way, I will then pass it to my boss to handle... After you read it, you feel angry because they are accusing you of not doing something right. They will write you a long story of two pages telling you that you've done something wrong... (Senior Trade Executives, Female, aged 21-30, the HQ, PEACE)*

Examples of e-mails which were perceived as rude by this Senior Trade Executive (named S) and which had caused conflict between her and her virtual team member (named T) are demonstrated in the following:

*After waiting for some week for special XXX rate, I had to say at the end to our customer that we are not interested in his cargo... It is your turn now to tell us where you need the boxes and the rates that you can offer... (Written by T on 19/12/005)*

*What are you waiting for? You have the figures we received from E and D. (Written by T on 20/01/2006)*

*We can be all anxious to secure shipments but on the other hand I do appreciate e-mail ethic where tone is concerned. Where there is urgent matter, there's always the phone. (Written by S on 22/01/2006)*

*You are right! Ethic is quite important... But please explain to me why we have to wait for such a long period of time. Why do we have to send reminder and reminder? Is that ethic as well? We did call around, did friendly ask our customer to offer us... on 09/01, we gave you the details. Today we are 14 days later... and do you really think I can do this more often? I remember the last issue where you disappointed me as well and we did not get your reply at all... Maybe we should discuss ethics in the other way round? With very friendly greetings from a frustrated agent which will not be able to arrange bookings and to claim any commission which would be our income... (Written by T on 23/01/2006)*



Other examples of e-mails gathered in Team 3 containing wording in bold and capital letters which were perceived as rude and had caused conflict are:

*WHY DON'T WE GET A SIMPLE REPLY ON OUR SIMPLE QUESTIONS  
(in capital letters)??? (Written on 03/03/2006)*

*Hope the punishment is just one-off otherwise it will be very difficult for us to accept the last minute booking. For your information, the rate for shipment is fixed today. Of course we are unable to accept it again per your instruction. **I REMEMBER M SAID** (in bold and capital letter)... If other ports do have higher revenue cargo contribute to this vessel (YMO019), we would like to release RS slots to them on captioned voyage only. Then, you cut 40teu for both RS slot and vessel total slot... I don't know if PEACE Shanghai use per 40teu slot to load RS cargo exclusively or add it for other trade lane cargo... For your information, herewith is the notice for R to shift the cargo to other vessel due to the 40teu shortage... (Written on 20/07/2006)*

Another employee in the Singapore HQ described how his identity with the team was affected by different approaches to communication:

*Frankly, I identify less with the virtual team than the co-located team.... Virtual is not the issue. It's like a friend going overseas and you communicate via e-mails and phones. But when it comes to writing e-mails, the problem with culture is – For the Chinese, they are very diplomatic when they write. For Europeans, they are too frank. The first time that I was dealing with Western people, they were using exclamation marks all the time and they kept asking 'why'. We, people from the East, we will write 'we suggest, we think perhaps it is better. (Trade manager, Male, aged 31-40, the HQ, PEACE)*

On the other hand, e-mails which were perceived as 'good' ones were collected from PEACE. As commented by the Customer Service Manager (Female, aged 31-40) of

PEACE's UK branch, 'these e-mails improved our relationships in the virtual teams'. According to this manager, examples of words or sentences written in these e-mails which were perceived to have improved the work flow and relationships within her virtual team are: 'Sorry for the late response', 'thank you and have a nice weekend', 'A HAPPY NEW YEAR. I hope this New Year brings you all that you want'. This manager commented, 'maintaining good relations over the phone conversation and e-mails within virtual teams is important as this helps in negotiating rates and getting issues resolved quickly'.

Likewise, praise and encouragement were often included in the e-mails written by the leader of Team 5 (Engineering supervisor, Male, aged 40-50, UK branch, FORTUNE) in order to improve team spirit. For example:

*Thank you so much for your support. I have not originally planned this as a conference call but, given the level of interest, this DOES seem to be appropriate. By copy of this e-mail, I would also like to invite E and G to take part...Thanks again to all for your enthusiasm (e-mail dated 04/11/2005)*

*On time and accurate... as always! (e-mail dated 19/11/2005)*

Most employees in Teams 2, 3, 5 and 7 indicated that due to the massive reliance on the ICTs in communication, the language barrier is a critical issue as it creates conflict and influences their identity. A female Accounts and Administrative Executives (aged 31-40) in BATIK found that miscommunication and misinterpretation influenced the perception of colleagues. For example, misunderstandings caused by e-mail influenced her perception of other colleagues' personalities and working attitudes. Another employee commented:

*...the way we express and use English often reflects our attitude... I don't blame them all the time... I am Portuguese so obviously my English is different as well. (Sales and Marketing Executive, Female, aged 31-40, the UK branch, PEACE)*

Employees feel excluded or isolated if they cannot communicate with or be understood by their colleagues. In PEACE's UK branch, it happens frequently when Western members liaise with colleagues from China and Africa. A male Senior Customer Service Executive (aged 21-30) felt inadequate when it came to dealing with his colleagues in China. Whenever there was a problem, he would ask a UK based Chinese colleague to speak to them instead. This approach seemed to solve the majority of the Senior Customer Service Executive's problems. This example not only indicates that there is a language barrier, but also that speaking to colleagues in their common native language signifies that members come from a similar social group. According to the UK based Chinese colleague to whom the Senior Customer Service Executive turned:

*In China, it is easier to do marketing if you are there or if you speak to them in their own language. For customers who do cargo... If you want more space, there are always ways to get it. You just need to know how to deal with them* (Sales Executive, Male, aged 31-40, the UK branch, PEACE)

Although most employees from PEACE and BATIK preferred to identify with others from a similar working cultural background; there were exceptions, as when members believed that there were less desirable aspects of their culture which jeopardized self and group image:

*Although I originated from this country, I work better with people from abroad because I know how people from my own country work and behave. They like to make promises without thinking of the consequences and this put me off...* (HR Executive, Female, aged 31-40, Kuala Lumpur branch, DELIGHT)

Likewise, some employees indicated that they identified with certain colleagues regardless of where they originated from. In these instances, identification was motivated by a high level of acceptance or tolerance and understanding within the team. A male Assistant Trade Manager (aged 31-40) in PEACE's HQ found that regardless of who his colleagues were, as long as they were willing to seek understanding and conform to the company's

values, he would definitely identify with them and that his identity with the team would be stronger too.

Most participants acknowledged the importance of virtual teamwork as a way to pool resources for task completion. Thus, it is essential for members to work well with others in order to get things done. For employees, especially those who have been involved in virtual teamwork for many years, there is greater tolerance towards cultural diversity. They see diversity as advantageous to the organisation. Identification is made possible because of the benefits gained from working with people of a different cultural background. As an employee relates:

*I can see myself working in virtual teams because the teams help to improve my negotiating and decision making skills by dealing with different scenarios* (Sales Executive, Male, aged 21-30, the UK branch, PEACE)

Initially it was assumed that people may identify more strongly with those from a similar working cultural background and that diversity may have a negative impact on employees' identification. Evidence suggests that differences in working culture resulted from members' different approaches in handling work priority and in e-mail etiquette, both of which led to the emergence of national and racial stereotypes. These stereotypes are detrimental to teamwork as they cause conflict and affect members' identification. However, when employees share similar values in relation to work, the impact of cultural diversity on identification is lessened. Language is often viewed as the most common cultural marker, and speaking the same language may enhance social contact and affinity among the employees, thus promoting identification. Language may also serve as one of the mechanisms for getting things done in virtual teams, as speaking in a common language tends to minimise the tendency of misinterpretation.

#### **6.3.4 Geographical Dispersion and Identification Processes**

The results show that the identity of most employees in Team 2 and Team 5 was affected by a lack of face-to-face meetings and social interaction. One employee commented that his sense of identity with the team was lost because:

*It's virtual after all. When I was in sales, I always told my customers, for communication, the best way is to talk face-to-face. To me, I like to see the other party when speaking with him/her; I like to have eye contact (Trade Executive, Male, aged 21-30, HQ, PEACE)*

Likewise, a Deputy Trade Manager (female, aged 31-40) in the HQ found that it was simply natural for people to communicate face-to-face. From her experience, she may speak with a person over the phone a few times, but only if she can see him/her in person, is she able to put a face to the name. She felt closer to the colleagues that she had met before. Indeed, physical proximity creates a shared context which may improve teamwork. Another Deputy Trade Manager (female, aged 31-40) working in the same office, indicated that she identified better with co-located teams than virtual teams because, 'working in the same office, I have the benefit of attending the morning meeting so we get a chance to meet each other... perhaps that will help in our understanding on certain things'.

Most employees in Teams 2, 3, 5 and 7 commented that challenges brought by using ICTs created conflict and prevented them from identifying with teams. For Teams 2, 3 and Team 7 where there is massive reliance on e-mail correspondence rather than phones in communication, delays and misinterpretation were bound to occur. A male Sales Executive of PEACE (aged 21-30) in the UK branch indicated that it was harder for him to identify with a virtual team because the team was too dependent on e-mail and he believed that sometimes things cannot be sufficiently explained in writing. Likewise, when an employee in the HQ was asked if proximity influenced his team identity, he noted:

*The success of virtual teams depends on the IT medium. If you are talking about just e-mail and phones, it is quite difficult. Two different time zones, it's a bit tough... definitely we need to look at the time difference and the type of discussion – whether dealing with normal transactions or generating ideas... The only difference I feel between these two types of team is I build stronger bonding and rapport with people from the local office than those in virtual teams (Senior Trade Executive, Male, aged 21-30, HQ, PEACE)*

There was a lack of facial expression and reaction from employees when using communication technologies (ICTs) for negotiations. Employees in Team 5 in FORTUNE were not satisfied with communication via the ICTs, although they had access to more advanced communication technologies such as video-conferencing, than any other team in this study. The company invested approximately £20,000 in ICTs and yet face-to-face meetings were still needed and preferred by team members. They encountered difficulty in using e-mails and phones as each member was involved in more than one project at the same time, and as such had to juggle a great deal of information.

Although employees in Team 5 could communicate via teleconferencing, miscommunication could still happen, especially among those for whom English was not their native language. The absence of visual and other non-verbal communication cues seemed to be the main cause of miscommunication and perhaps conflict. This affected employees from Brazil. They noted that when meeting their colleagues face-to-face, they could read their lips to enhance understanding.

From the observation data gathered during most teleconferencing, the noise level was high and it disrupted their conversation. For instance, in the teleconference dated 11/04/2006, members in Team 5 were gathered to discuss the qualification of testing by one of their Drilling Suppliers (IDS). Included in their discussion were technical concerns for the testing (e.g. temperature required for the testing and materials used to produce pipes). The members also discussed whether all plants (UK, US, Brazil and Norway) were ready for a single global standard and supplier. During the discussions, it was observed that the noise level was high over the phone. While the Brazilian employees were explaining the reasons for their preference to use Duplex as material for pipes rather than other materials, the team member in the UK plant could barely hear the explanations so he had to guess their meaning by summarising and repeating those points mentioned. At times, the Brazilian team members were disconnected and they had to re-dial to join the phone discussion.

Indeed, most of these team members in Team 5 found that long-distance communication was not suitable for the discussion of highly technical issues. However, this problem could be overcome by a close follow-up on the progress in task completion. As the team leader (Male, aged 40-50, the UK branch, FORTUNE) commented, 'minutes on the issues

discussed will be sent to each team member, followed by e-mails updating the progress of each member in completing the task’.

Diversity in terms of location was not a problem to many employees in Teams 1, 3, 4, 6 and 7. The results showed that as long as employees were working towards the same goal, they would demonstrate the same working attitude in virtual teams as in the co-located teams. A manager commented:

*Sense of belonging is not so important... If the team is able to generate profit for our company, I guess this is enough to keep me going and I can see myself working in the team despite the geographical distance. (Purchasing Manager, Female, aged 31-40, Myanmar branch, BATIK)*

In brief, diversity of location has a negative impact on employees who perceive social interaction as essential to fostering team identity. An absence of visual and other non-verbal communication cues reduces their ability to identify with the team members. Two groups of people are affected by this factor – firstly, the sales people in PEACE and secondly, the Brazilian employees of FORTUNE who perceived social interaction as important in facilitating teamwork. In addition, geographical distance and the substantial reliance on information and communication technologies can prevent the virtual team members from having smooth discussions over technical issues. However, these challenges can be overcome by having good quality communications in virtual teams. Also, it was found that diversity of location is not creating problems for those employees who have clear common goals and values. The intervention of management in fostering team identity moderates the negative impact of diversity, as will be discussed in the following sections.

### **6.3.5 Role of Management in Promoting Team Identity**

In virtual teams where reliance on tangible or visible cues for team identity was not available, then strengthening the psychological tie between the employees and teams was important (see Chapter Four). In terms of fulfilling individuals’ needs, the findings suggested that the role of management was crucial for providing sufficient information to

shape the perceptions of others, creating and communicating the group goals, and providing sufficient work-based support.

#### **6.3.5.1 Availability of Information and Perception of Others**

Information about the existing actions taken by management in the four companies in this study was gathered from the responses of each of the four team leaders. In PEACE, there was no team leader formally chosen for each team. Instead, decisions were made by departmental leaders of the HQ and the UK branch. For example, W, the FES Trade Manager of the HQ and R, the Pricing Manager (also the General Manager) of the London office were the leaders of Team 1. In an effort to make information available to improve members' perceptions of the team, several actions had been taken by the management. For instance, face-to-face meetings were arranged and e-mail was used for disseminating information:

*The company sends us over to Singapore. This is necessary. It makes a huge difference when you know the person that you are dealing with. You find that they will go the extra mile for you. Yes! We can still get the job done but once you build the rapport with somebody, you know each other – it makes a big difference on how things can be done in the team... It would be difficult if people... do not impart the information... there are all sorts of electronic mail available. It's there for a reason... to keep everyone informed... after a while, you get to know the people that you are corresponding with. (Europe Trade Manager, Female, aged 31-40, UK branch, leader of Team 1, PEACE)*

Social interaction was encouraged to improve team spirit. In PEACE, the Fleet Division Manager (Male, aged 41-50) in HQ, who was also a leader of Team 4, indicated that he always encouraged the members not only to discuss day-to-day tasks regarding work, but also to keep in contact with each other generally. Additionally, whenever a new team member arrived, the leader of Team 4 made sure to share information about them, such as the person's background and length of time in the industry, with other members. This approach was also seen in other teams. As one of the leaders of Team 3 commented:



*When people from another country join the team, I don't know this person and suddenly you have to work with him/her. I might find out some theoretical background about this person but I always tell my guys, cross culture is important and we got to take time and effort to know and understand our colleagues so that we know how to act accordingly and deal with them.* (Deputy Operational Manager, Male, aged 31-40, HQ, Leader of Team 3, PEACE)

Likewise in BATIK, employees were encouraged to socialise with each other to improve communication. Indeed, the leader of Team 6 encouraged team members to chat on the phone. She noted:

*Sometimes social interaction helps! We need that to get to know the members better. I usually encourage the team to chat over the phone. In that way, we actually listen to their voice and have personal interaction. By listening to their speech and through their interpersonal skill, I can roughly guess what type of persons they are and their working attitudes* (Accounts and Admin Executive, Female, aged 31-40, Malaysian branch, Leader of Team 6, BATIK).

For DELIGHT, because the nature of the project was non-operational and the bulletin was issued on a quarterly basis, members did not work on assignments which were directly related to those of their colleagues, hence they had less interaction. Yet to them, familiarity with colleagues was still important. Thus, an annual face-to-face meeting was arranged solely for the purpose of social interaction. In FORTUNE, the leader did a good job of preparing an agenda and information about the project, yet he neglected to introduce team members to each other or to encourage team building. A comment by an employee from this team illustrates the strain of their relationship that such neglect put on the working relationship:

*For some people in the team, I came across their names but I have never met them. I don't really know what their functions in the team are. The guys that I met before are G, R and F. I know what they are after and working on but*

*not the other members.* (Lead Metallurgist, Male, aged 31-40, Houston branch, FORTUNE)

This finding does not contradict the comment made by this employee that he was motivated and satisfied to work with ‘experts’ in the teams despite not knowing their background (see section 6.3.1). In fact, when this project started, he already knew a few prospective team members (G, R and F) and agreed to join the team precisely because he knew of their good reputations. Had he been given a short history of the work and reputations of his other new team members it might have helped them develop a closer working relationship. In addition to providing new team members with information about their colleagues and work sites, it is also crucial to create and effectively communicate team goals if team leaders want to foster group identity.

From the team members’ point of view, the factors of availability of information and perception of others affect their identification in virtual teams. Most of the members in Teams 3 (Customer Service team), 4 (Fleet Management team), 5 (Integrated Value Engineering (IVE) group), 6 (the team in BATIK that handles importation shipment) and 7 (General Human Resource (GHR) Bulletin team) were concerned with the behaviour of their colleagues and were more easily able to identify with colleagues who were cooperative, well-organised and willing to take the initiative to seek common understanding. A male Ship Planner (aged 31-40), working in PEACE’s HQ found that his degree of identification with the team depended on ‘who the members were’ and ‘their attitude at work’. Information about their colleagues’ qualifications and experience in the industry is particularly helpful for employees who are new to the team, and such knowledge helps them to gain trust and confidence in the team. A newly recruited female employee (aged 21-30) undertaking customer services in PEACE’s UK branch indicated that she, ‘could identify better with the team if I had knowledge of the abilities and background of my colleagues’. Such information would enable her ‘to have a clearer picture of who my colleagues were and how to deal with them in the future’.

Although many employees have accepted and lived with the limitations of working with virtual teams, insufficient information often prevents employees from building and generating a positive perception of other team members. A Lead Metallurgist (Male, aged

31-40) in FORTUNE observed that he ‘could not identify with other employees except for those whom he had met and worked with before’. He also noted that he ‘hardly knows the new team members because the team leader has made no effort to introduce them’. Sometimes, having information about employees and the happenings at various sites promotes team identity. One employee made a comparison of his present team with the team in his former company:

*I tend to identify better with the former teams in my previous company as compared to the present one. We had an internal magazine issued quarterly that reported the happenings at different sites...Reading that information gave me a clearer picture of the local news and those people that I had never met...* (Marketing Executive, Male, aged 31-40, UK branch, PEACE)

#### **6.3.5.2 Creation of a Common Goal**

This section reports the actions taken by team leaders in creating and communicating common goals. As presented in section 6.3.3, differences in values and a lack of common understanding creates a difficult working environment and consequently prevent most employees in Teams 1 (Pricing team), 2 (Sales and Marketing team), 3 (Customer Service team), 4 (Fleet Management team), and 5 (IVE group) from identifying with their respective teams. Most of them found that when group goals were clarified, they were happier to work as a team. Employees in these teams pointed out that although colleagues were geographically dispersed, they were able to identify with their teams when they had a shared goal. It was found that creating and communicating group goals to team members moderated the negative impact that geographical distance has on employee identification with the team (see section 6.3.3.2).

When team leaders were asked to comment on ways to increase the team effectiveness, most of them suggested that creating and communicating a clear common goal was crucial. In Team 5, members came from a range of locations and their respective priorities were on catering for the interests and agendas of their local offices rather than for the virtual team. Because members of Team 5 had different requirements and approaches of working on the clad pipe depending on which local office they belonged to, it was difficult for them to

achieve consensus on the standardised specification. Observations made by the team leader illustrate his attempt to improve co-operation among the members:

*As a coordinator, I try to make sure that everyone in the team is included. I always make a special effort to obtain and to consider everyone's opinions. I make sure that everyone in the team agrees on the key project parameters, project goal, delivery, and time frame.* (Engineering Supervisor, Male, aged 41-50, UK branch, FORTUNE)

Likewise, clearly communicating a team's goal was an important task for the leader of Team 6. She believed that employees needed to have an idea about their role in the team as well as a clear understanding of the goals and objectives for the project on which they were working. She found that as long as team members could perform the task required of them on time and as a result, help the group achieve its goal, then job satisfaction and team identification increased. In the company, both the Malaysian and the Myanmar offices shared similar values, but these differed from those held by their insurance company in Singapore. As the representative of the Singapore office illustrated:

*...In terms of interests, we are different. To us, we want enough and advance information to provide the ship insurance and make money. But to them, they want to save cost and try to fill up the containers before providing us with all the information we need. This often causes delay and I am stuck on my side.* (Division Manager, Female, aged 31-40, Singapore branch, BATIK)

However, because of the team leader's efforts, employees were aware of their common goal, which was to act as the middleman for all of the importation shipments to Myanmar as well as to prepare the necessary documentation for goods to be shipped into the country.

In PEACE, the HQ and the London office were working closely with the Far East European Service (FES). Although they worked towards the same goal, they still have a conflict of interest due to differing power and roles held by the HQ and the branch office (see 6.3.3). Team leaders were aware of the importance of clarifying a group goal and employees' roles

in increasing team cohesion. Further, they believed that having a group goal generated team spirit. As one of the leaders of Team 1 commented:

*The authority of the London office is high but within certain guidelines... For pricing, they have to report to me as I am answerable to the bottom line of the service but I don't interfere unless it is necessary... We give them guidelines to work within and they know they have quite a free role to play... If they have made certain decisions that we think are not appropriate, we step in to tell them the right way – they have to be in line with our HQ requirements.* (Trade Manager, Male, aged, 31-40, HQ, Leader of Team 1, PEACE)

The leader of Team 3 (from HQ) believed that an effective team was a team which had a clear understanding of its goals. Cooperation among its members in the pursuit of the goal generated team spirit. A member of Team 2 (Assistant Trade Manager, Male, aged 31-40, HQ) suggested that 'communicating the vision, objectives and general guidelines of the team to its members is crucial in building a common platform and standardising procedures'. However, the leader in Team 3 had neglected to make the guidelines clear to members and unfortunately this hindered their group identification. Because these guidelines were vague, an employee developed negative perceptions about his UK colleagues in terms of their working attitude:

*There are always conflicts, especially with the people from the UK... Sometimes they are not following procedures... For ship planners, we have a set of procedures laid out for us to follow... I don't face much problem because I follow the procedures when I do things... Sometimes the manager is supposed to update the subordinates and he is not updating them... My impression towards the UK people, I don't know why it's so negative...* (Ship Planner, Male, aged 31-40, HQ, PEACE)

A shared goal reduces the uncertainty faced by members in the virtual teams and promotes group identification. The findings reveal that employees who were given clear goals to achieve and a role to play had a better understanding of the way the team would work

overall. Conversely, when employees' roles were unclear or if they conflicted with the roles of their colleagues, this caused stress and hindered communication with the team. A common goal enables individuals to understand how their individual success is linked to that of their colleagues. It emphasises interdependence and fosters their efforts to work as team members. This sense of unity and commitment can be strengthened further if employees enjoy a good working relationship with their team mates.

### **6.3.5.3 Perceived Work-Based Support**

Employees reported that the assistance they received at work created a closer bond with their colleagues. Most participants in PEACE and FORTUNE (Teams 1, 2, 3, 4 and 5) enjoyed the teamwork when team members were willing to assist one another. Indeed, they felt valued and important when they perceived that they were helped and cared for by their colleagues:

*I like my team... even when I am not around, they will help by covering my work, we help each other out... I enjoy that kind of teamwork and I can identify with the team very well.* (Trade assistant manager, Male, aged 31-40, the HQ, PEACE)

Work-based support can also be demonstrated by tolerance to an individual's mistakes as well as receiving help from superiors. Some employees in PEACE indicated that they enjoyed and felt satisfied working in their teams because they felt that not only were their colleagues friendly but that there was also a high level of tolerance to mistakes. Likewise, in FORTUNE, two employees from Brazil were very encouraged by the work-based support they received in terms of the freedom they were given in carrying out their work. A welding specialist (Male, aged 41-50) in the Brazil branch of FORTUNE found that the relationship he established with his superiors and the encouragement he received from them had given him a sense of security in his work.

Employees' inter-group behaviours sometimes depended on the extent to which their social needs were fulfilled by their work with their teams. Lack of work-based support and social interaction led to a male Assistant Trade Manager (aged 31-40) in PEACE identifying

better with members from the Far East rather than those from the West. He perceived colleagues at the HQ as being friendly and helpful people who supported him when he was away from the office. Conversely, he felt he received little or no assistance from his colleagues in the UK branch.

There are employees who show a willingness to help others at their own expense simply because they enjoy it and it makes them feel good. This sort of employee believed that helping one another was the right thing to do and this was how one should behave as a member of a team. As a male Fleet Division Executive (aged 31-40) in PEACE's UK branch put it, 'teamwork means the other person should feel that I am supporting his work and it's my job to support them'.

Support received from the management was also vital. Lack of support may leave members feeling that the project is not important to the organisation, thus discouraging their commitment to the project. A project run by Team 5 in FORTUNE had been put on hold for more than six months by the time the researcher returned to the company. When asked about this lack of progress, the team replied:

*There was no support received from the management... The team came together because we recognised that we have a problem in common. However, no one external to the team had an insight into what we were doing, so when other issues arose in people's normal jobs, understandably, they drifted away to deal with those. The situation was sustainable for a while due to the commitment of the project leader (me); however when I also got caught up in other work, the team collapsed (Engineering Supervisor, Male, aged 41-50, UK branch, FORTUNE)*

Of course, the role of management in encouraging employees to think as a 'team' or 'family' enables the employees' diverse cultural and social background to work as one, for example, in Team 3 where the leader did a good job in educating members and creating such a culture in the team. A male Customer Service Executive (aged 21-30) in the UK branch noted that 'the concept of "us" and "them" was not allowed in the organisation and top management always emphasised the idea of one family... The moment we started our

work for this company, we had to always bear this concept in mind'. Further, when conflicts arose, he noted that they 'are taught not to pinpoint a particular team member but to solve the problem in a polite and discreet manner'.

Other intervening factors, such as arranging face-face meetings, create a positive atmosphere for employees in PEACE and FORTUNE. PEACE has a practice of sending personnel to visit their virtual team members once an employee has worked in the company for more than three years. Many people see this as an opportunity to improve teamwork. Alternatively, because of the high cost of travelling, employees found that they could make use of ICTs to build rapport with colleagues. For example, FORTUNE had invested a substantial amount of money in ICTs but the technologies are only beneficial when they are used in an appropriate manner to enhance healthy communication amongst employees (see 6.3.2). Likewise, PEACE had started to install a webcam on every management-level desk. Due to issues of security, only the top management personnel were allowed to chat online via the webcam during the period when this research was conducted. This meant that even though advanced ICTs were present in the organisation, most employees did not have access to them and were encouraged to solve their problems over the phone.

The leader of Team 6 indicated that giving encouragement and praise was a good way to support employees. Likewise, the leader of Team 7 found that compliments in terms of reward and public recognition were most effective when they came from team leaders themselves:

*I always give them encouragement. For good articles, I like putting myself in their shoes and I know it is difficult to come out with the articles... I will go beyond to say thanks and I praise them for producing great articles.*  
(Personal Assistant, Female, aged 31-40, Kuantan branch, Leader of Team 7, DELIGHT)

Overall, management role and the use of ICTs play an essential role in promoting identification. While ICTs generally add value to organisations, it is important to address any possible drawbacks in using ICTs. In addition, support from management in providing sufficient information and work-based support and creating and communicating team goals



are essential in promoting identification with virtual teams. This intervention replaces the missing visible and tangible cues, which are often used to promote a sense of belonging and unity in the co-located teams.

#### **6.4 Conflict in Virtual Teams**

Conflicts in virtual teams generally come in the form of disagreements between individual team members. These disagreements are almost always conflicts over differing approaches to accomplishing the team goal rather than conflicts over personal issues. Thus, when the respondents were asked to recall past conflicts, they seemed to have difficulty in remembering them. An employee in PEACE pointed out that the conflicts which occurred in the team were conflicts over work processes rather than personal issues:

*Let me recall and see if I can remember... Well, most of the conflicts are dealing with work and not personal... when we send e-mails out to ask for something to be done, if the other party doesn't do it, it is frustrating! You need to hold back when writing e-mails. You tend not to put in your emotions and everything that you feel because people are passing e-mails around*  
(Customer Service Executive, Male, aged 21-30, UK branch, PEACE)

Likewise, a male Senior Trade Executive (aged 21-30) in PEACE's HQ preferred not to use the term 'conflict', and instead preferred to describe disagreement as 'misunderstanding due to a distinction of interests between the HQ and the subsidiaries'. Other employees denied the existence of conflict in the work environment, simply saying their people had different approaches to work and doing business.

Conflicts arising from different approaches to completing tasks and undertaking particular processes associated with a project are often considered by organisations as constructive, but only if such conflicts are well-managed. Otherwise, conflicts can be disruptive to performance. The findings suggest that if two team members are in conflict for an extended period of time, with both parties failing to seek a common understanding, then the working relationship will be negatively affected. In such circumstances, employees will have negative thoughts about one another that will adversely affect their in-group behaviour. For

example, a ship planner who had already been working in PEACE for twelve years was annoyed by the unresolved conflicts in his team. Consequently, the conflicts and his annoyance had a negative influence on his interactions with the team:

*There are always conflicts, especially working with people from the UK... They don't do their part in updating us. When the matter was being brought up, they got excited and caught up... However, we didn't consult each other in the end... Usually I will go straight to my managers and see what they recommend... These European people, of course their actions won't give them problems, but we face problems... I often override them... in the end, they will follow... This is how I solve the problem... My impression towards them is bad, they are lazy... they normally take their own sweet time to do things. So with them, I minimise the interaction as much as possible, they are not interested in listening to problems we face here...so I will leave them alone. (Ship planner, Male, aged 31-40, HQ, PEACE)*

As presented in 6.3.2., conflicts are caused by differences in working culture, location, language, values and interests, together with miscommunication and misunderstanding that result from relying on ICTs rather than face-to-face contact for daily communication. Conflicts not only influence the team performance, but also prevent members from identifying with the teams. This is especially true if they perceive the conflicts as also threatening to their identity.

## **6.5 Identity Threat and the Low Status Group**

Chapter Four discussed how employees' identity is not fixed and how they often seek membership in a higher social status group in order to improve their own self-conception. Groups with lower social status are less secure in their collective identity. In the four companies selected for the present research, employees' identity was threatened in several situations. Conflicts in PEACE often occurred due to inequalities between the decision-making power of the HQ and its branch offices. Thus, employees in the branch offices often felt that they were being treated with less respect and that HQ did not listen to them. The unequal distribution of power influences how people identify with their group and in

the case of PEACE the unequal distribution of power fostered a feeling of ‘us’ and ‘them’ in the branch office. An employee in the UK branch mentioned that he identified much less with his current team than he had with teams in his previous company because:

*I had a quite positive and high self-conception when I worked in the team in my previous company... I found that I was in control of things and it gave me very high job satisfaction... Here, although we are said to handle European trade and it sounds big but all the decisions are referred back to HQ and we are controlled by them... We are not compatible with the Western enterprise... (Marketing Executive, Male, aged 31-40, UK branch, PEACE)*

Such feelings influence members’ identification with their team members. Another Customer Service Executive (Male, aged 21-30) in PEACE’s UK branch found that there was definitely a feeling of ‘us’ and ‘them’ when employees in the branch were relating to the HQ – ‘Singapore office and us, definitely “them” and “us”. They tell us how to do things... Sometimes I could advise them because I have worked longer than the other persons. Yet, they will tell us what to do’.

Additionally, there were situations where employees perceived that they were treated unequally as a result of cultural differences and the language barrier. An employee from the West found that she was perceived as ‘alien’ when she visited the Singapore HQ. She was a vegetarian and did not try the local food; as a result, she received negative comments from a senior manager there. The incident was reported to the top-level management in Singapore. She said:

*This was a big shock to me. If you come to Europe, people ask you what you would like to eat... Some of the European agents, when they go out there, they complain they have to eat Chinese food every day. So, when my supervisor was taken to eat sea worm (like sea slug)... because he had been sailing, he said ‘ok’ I will eat it and knock it back with whisky. Sigh! Singaporeans are too proud of their Chinese heritage, perhaps they want to promote it to visitors and business contacts but not to us from the West. This*

*is a sensitive issue.* (European Trade Manager, Female, aged 31-40, the UK branch, PEACE)

In FORTUNE, the project they were working on received no management support, and the team was not considered important to the company. Consequently, members of the team also considered their group to have low social status. This also occurred with teams working in DELIGHT while compiling the GHR Bulletin, which was a non-operational project thus it seemed that the work of this team was not important to the company's management. This neglect by management influenced members' perception of the team. The team leader commented:

*Whenever the quarterly issues started to kick off, I always sent them an e-mail listing all the requirements, deadlines and things to write about... But... they started working a day before the deadline and they give me crappie work. And I had to sacrifice my time and deal with those mistakes. It's never-ending and quite frustrating... Most members see this as only a newsletter so no big deal... I feel strongly about it because the project is not an operational one. People won't commit to it and I always get rejection from them* (Personal Assistant, Female, aged 31-40, Kuantan branch, Leader of Team 7, DELIGHT)

In BATIK, employees in one virtual team represented offices in Malaysia, Singapore and Myanmar. All team members were considered to be important to achieving the group goal. However, employees who did not speak English as their first language felt that there was a language barrier, and this perception led them to feel like inferior team members. When the team was considered to have low social status, its members' self-esteem came under threat. According to Social Identity Theory, in circumstances like this, individuals will want to improve their sense of self, but the strategies they use to do so depend on the permeability of inter-group boundaries for identity, as discussed in Chapter Three and Four. The following sections explore situations where self-enhancement strategies are used to reduce the uncertainty employees faced in their teams.

## **6.6 Permeability of Boundaries for Identity, Self-enhancement Strategies and Conflict Handling Behaviour**

The degree to which boundaries of identity are permeable in virtual teams depends on whether those teams are on-going or temporary entities, as well as on the character of the tasks assigned to them. The latter includes the nature of the task and the degree of difficulty in completing the task (see Chapter 4). The results suggest that when conflict occurs and inter-group boundaries of identity are permeable, then members believe that by transferring their membership to a group with higher social status they will improve their sense of self. Inter-group boundaries are considered permeable not only when group members are engaged in a temporary virtual team and the likelihood of working with the same colleagues in the next project is low, but also when an employee is a member of more than one team, both co-located and/or virtual, at the same time.

If inter-group boundaries are impermeable, that is if group members are part of an on-going team and the likelihood of working with the same colleagues in the next project is high, then employees tend to stick with their low social status team and work with their colleagues to improve or protect the team's current status. As projects and task characteristics assigned to a given team dictate the permeability of inter-group boundaries, the analysis of the results will be presented at the level of the team as a unit.

### **6.6.1 Teams 1 to 4 in PEACE**

Employees in Teams 1 (Pricing team), 2 (Sales and Marketing team), 3 (Customer Service team) and 4 (Fleet Management team) were all handling operational/transactional projects and were engaged in on-going teamwork. Thus, the inter-group boundaries were considered impermeable, as the possibility of working with the same colleagues in future projects was high. Although employees in both offices were engaged in virtual teams and co-located teams simultaneously, employees in the Singapore HQ were engaged in more virtual teams (e.g. virtual teams engaged with colleagues from branch offices in Australia, Africa, the Gulf region and so on) than the UK branch office. Therefore, teams based at HQ had more opportunity to transfer their group membership from a low to high social status team than did employees in the UK branch.

The ways in which employees handled conflicts were affected by the social status of their team as well as the permeability of group boundaries. Employees in HQ generally felt socially superior to their colleagues working in branch offices. When conflicts arose, employees based at the company HQ believed that they had the responsibility to force the branch office employees to comply with the company rules and working culture. If conflict persisted, employees in HQ would draw on their higher authority in terms of hierarchical rank within the organisation to override the subsidiaries and take control of decision-making processes. Most employees in the principal office perceived that they had a greater influence in decision-making so they had to set a good example to and direct employees in the company's subsidiaries. As a result, they would first approach conflict resolution with a collaborative approach. As an employee pointed out:

*We are supposed to lead and guide them... European agents, they are more direct, I would say more sarcastic in their way of replying. Even though I am a very bad tempered person... but we don't show our emotions or use nasty words, we reject them in a polite way.* (Assistant Trade Manager, Male, aged 31-40, HQ, PEACE)

This interview quote was supported by the observation data which demonstrated how this Assistant Trade Manager in the Singapore HQ (named F) controlled his frustration when dealing with conflict (See Appendix VII for diary note taken on 12/09/2006). It was observed that F was able to control his frustration because of two reasons: firstly, F perceived that replying e-mails with sarcasm out of anger is an unprofessional way of doing things. Secondly, he received advice and support from his manager on handling conflict collaboratively. Hence, it can be concluded that self-image or the conception of self (acting professionally) affects members' conflict handling behaviour. Additionally, support and encouragement received from management in handling conflict collaboratively is important.

The e-mails gathered in PEACE demonstrated some of the ways in which e-mails were written and these e-mails revealed the team members' behaviour in handling conflicts. For instance, looking at the example in section 6.3.2.1 regarding conflict which occurred between S (the female Senior Trade Executive in Singapore HQ) and T in Team 2, S chose

to put aside the negative feelings and resolved the conflict collaboratively. After receiving the last e-mail from T on 23/01/2006, S replied on the same day:

*Thank you for your e-mail response. My point on the phone call refers to situations where... service to customers is important. Oddly I'm 'glad' that this situation has allowed us to review what is still lacking in our structure and for which has to be addressed and in order for all to move forward. I'll like to avoid finger pointing and wish to re-establish some simple procedures for parties reading in copy to adhere to... As we move on and thinking out loud, we'd try to improve on information availability... (Written by S on 23/01/2006)*

Her collaborative behaviour in dealing with this conflict had ironed out some of the negative feelings and had 'softened' the conflict situation. This can be demonstrated in T's reply after receiving the above e-mail:

*Thanks for your comments. We will do our best from our side. What we can see as... Thanks again for your kind efforts. (Written by T on 25/01/2006)*

The observation data demonstrated the impact of identification on the whole conflict handling process. For instance, in Team 1, the male Trade Manager of Singapore HQ (named W) had a conflict with the female European Trade Manager of the UK branch (named P). This conflicting issue was coded and displayed in Table 10 in Chapter Seven. In Table 10, party A represents P and party B represents W. As mentioned in section 6.3.2.1, W commented that differences in working culture had caused misunderstandings and conflict between P and himself. This conflict occurred between the 4<sup>th</sup> of September 2006 and the 7<sup>th</sup> of September 2006. On the 7<sup>th</sup> of September 2006, the researcher was able to observe the ways in which W resolved the conflict. Upon receiving P's e-mails dated the 7<sup>th</sup> of September 2006, W became unhappy as he regarded those e-mails by P to contain sarcasm and be rude. Frustration was noticed on W's face. Before taking any action, W turned to his two local colleagues in Team 1 and discussed the issues causing the conflict. Since those e-mails were also sent to these local colleagues, they were now aware of the situation. W gave his viewpoint and negative feelings concerning the way in

which these e-mails were written and was now trying to get agreement from the local colleagues. He then consulted these two local colleagues for their opinions on the situation.

W then decided to call P in the UK. In their phone conversation, W acted politely while explaining his standpoint about some of the issues regarding the stock report and why it was important to check the equipment status with respective trades. The conversation ended with an apology from W. Then, he said he hoped that mutual understanding could be sought in the future. After putting down the phone, with an unpleasant facial expression, W turned to his two local colleagues and spoke in an angry tone: 'she thinks she is the queen and everybody needs to please her... Tough lady! (Sigh!) How long more do I need to bear with her attitude?' (The Trade Manager, Male, aged 31-40, HQ, PEACE).

Clearly, the observational data revealed that W was able to express his 'real emotions' towards the conflict in front of his local colleagues. This implies that he tended to identify better with these colleagues than with his virtual colleagues. Additionally, it shows that although virtual team members may resolve conflict collaboratively, the 'real' emotions and feelings may be suppressed within virtual teams. This leads to both a constructive and a detrimental effect on team performance. In general, collaborative norms of conflict handling improve team performance. In this case, the conflict seemed to have been resolved and P did not experience the unpleasant atmosphere. However, if the team member's collaborative behaviour is not 'genuine' (i.e. parties do not work to resolve the underlying tensions), it may not improve work relationships within the virtual team, and may contribute to growing longer-term problems in communication.

Employees in the HQ would avoid confronting or solving conflicts directly if conflicts persisted. Instead they would refer the problem to top-level management, effectively overriding the UK branch's decisions. A male Trade Manager (aged 31-40) in the HQ indicated that the practice of overriding company subsidiaries was a way to assist the company to achieve its ultimate goals, since the role of HQ is greater than the subsidiaries and the latter are just regional offices. The HQ holds more information in relation to the company strategies and the whole network.



Because employees perceived that the HQ had a higher social status, the branches were excluded and not considered as part of the ‘big family’:

*An agent is still an agent. Sometimes I can see that they are very protective of themselves... Sometimes we have to draw a line. People will tell you - ‘Hey! You are getting too close to the agent; you cannot get too close to them because you are the principal. (Trade Executive, Male, aged 31-40, HQ, PEACE)*

Representatives of the HQ tried to form clear ties with colleagues in the local office. A male Trade Manager (aged 31-40) in the HQ found that he only considered the employees of the trade department in the local office as one team, i.e. ‘us’, because ‘it is very seldom that our decisions in the HQ will override each other and we are more autonomous. We won’t mention this decision is made by so and so but the Singapore European Trade will say, ‘this represents Europe trade decision in PEACE’’. Others indicated that they would have a stronger sense of identity with the subsidiaries, provided they could follow the HQ’s values.

Employees of the UK branch, on the other hand, are also involved in co-located teams and virtual teams at the same time. Most of the employees are handling projects in more than one team. Hence, the inter-group boundaries are considered permeable as members can switch their membership between teams whenever they want to. However, their identity boundaries are not as permeable as among employees in the HQ, because the latter are generally engaged in more teams and their projects are both on-going and require more extensive commitment. This has meant that although members can switch their membership to a certain extent, the inter-group boundaries of identity are not permeable.

The social status of the HQ is considered higher than that of branches and employees of the branch offices feel that their self-esteem would be enhanced if they were to work well with teams from the HQ. Most employees in the UK branch tried to display collaborative behaviour when conflicts arose. As an employee commented:

*There is no 'them' and 'us' concept among us... You will hear other people in this office telling you the concept exists because we are subsidiary and they are HQ... if you have this mentality, you are not doing yourself any favours... This is not going to help you and them... When conflicts occur, persuasion is the key. Not by forcing across arguments but justifying your concern, listening to their views... (European Trade Manager, Female, aged 31-40, UK branch, PEACE)*

Indeed, most employees in the UK branch were willing to seek a common understanding when conflict occurred and they would change their perceptions of the teams in order to protect their identity. At this point, employees of the branch could not deny their lower status in relation to the HQ and they openly acknowledged that their status had an effect on their self-image. An employee illustrated:

*When discrepancies happen on the rates between the HQ and our branch, this makes us look bad; and what's the image we portray to the clients? It simply means that we are unprofessional. When conflicts occur, we need to be tactful and the pressure is on us on how to explain to the clients. We normally calm down the client... we will try to sort things out internally... After discussion, the HQ will come back to us for affirmation and say 'please advise us on this'... we get down to the bottom of the story. We cannot blame the HQ all the time, sometimes the story is either they are not aware or because they ship 100 of the containers together so they get a better rate for that. (Senior Sales and Marketing Executive, Female, aged 31-40, UK branch, PEACE)*

When a manager was asked to comment on the distinctions being made between 'us' and 'them', he renounced the concept and explained it from a different perspective:

*I don't deny the perspective is there in our office. When talking about the inequality of power in decision-making, it is built that way because the trade line that we are involved with, we only have one link from the Far East to Europe. We look after the planning of the vessel, the tankers... There are*

*other services which are controlled by the HQ in terms of rates and policies – they are all inter-Asia connected from either the original or final destination. So we have to go to them for rates and tariff and all documentation required. Sometimes it is the word that we use - ‘between us and them’ and the control is always on the other side* (The General Manager, Male, aged 51-60, UK branch, PEACE)

Other employees of the UK branch found that there is no great problem working with colleagues in HQ and that conflicts that arose were mainly caused by differences in culture. They believed one only needed more time to understand these differences and seek clarification about what it was that the HQ wanted from them. However, for employees who have made several unsuccessful attempts to resolve conflicts in a respectful and collaborative manner, there arises great difficulty in identifying with their team. This leads to social competition and some negative inter-group behaviour such as open hostility, non-compliance, or distancing themselves from their colleagues in the HQ. An employee in the UK branch commented that when conflicts occur, he would choose to solve the issues in a polite and tactful manner. However, he felt disappointed when his suggestions were turned down many times:

*Simple things that I can handle, the HQ would want to know every single detail... They make all the final decisions. I really hate the way they treat me... I really hate it* (Marketing Executive, Male, aged 31-40, UK branch, PEACE)

This feeling has indeed caused him to dislike his colleagues and thus not identify with them. Employees would then display hostile inter-group behaviour if they perceived that they were being treated ‘unjustly’. They would openly challenge and confront the other party(s) involved in the conflict:

*I’m quite willing and able and happy to assist, if they consistently drag their feet... it is unprofessional... I will highlight the issues to all the managers, I c.c. to their managers to let them know it is for their interests or for the company? They should resolve the problem and I just don’t care. The sad*

*thing is sometimes I spoke directly to my colleagues and no one dares to challenge the HQ. Perhaps (again, I don't like to speculate) it is like they do things as they like and no one dares to challenge. You normally don't get an apology from them... When we make a mistake, we apologise... (Europe Trade Manager, Female, aged 31-40, UK branch, PEACE)*

Team members were aware that adopting an 'us' and 'them' mentality was prohibited in the company yet such mentality still existed and could lead to a refusal to interact with other teams. Members of the UK branch tend to distance or detach themselves openly from their colleagues in HQ:

*Even though we are told to think as a family... we should try to establish a good working relationship with them, I only do it with people that I look after i.e. people from the UK but not Singapore. So, it is just work and no more than that. (Customer Executive, Male, aged 21-30, UK branch, PEACE)*

When in-group bias presents itself in company sub-groups like the UK branch offices, employees will seek information or evidence to confirm existing stereotypes that they hold towards out-group members (i.e. colleagues in HQ). This happened to an employee when she dealt with people from the corporate desk in HQ. She commented:

*Their expectation is for me to drop everything that I am doing and attend to their need. I can appreciate that they may have deadlines but... I can organise my work and prioritise myself, but why can't they? The trade people that I work directly with, they say the same – 'oh yes, we have the same problem with people from the corporate level as well'... See!! They also say the same thing. So, I don't actually like to work with people from the corporate level that much. (European Trade Manager, Female, aged 31-40, UK branch, PEACE)*

Clearly, threats to identity have an influence on conflict handling behaviour. Most of the employees who face such threats would avoid dealing with the conflict directly and instead

they seek assistance from a higher authority. A Customer Service Executive (Male, aged 21-30) in the branch indicated that when conflict persists, he would avoid confronting the issue with the party involved and instead he would refer it to a higher authority like his manager or supervisors.

Overall, conflicts in PEACE often occurred due to the inequality in decision-making power between the HQ and the subsidiary<sup>4</sup> in the UK. There were also instances of differential social power within the teams themselves, as some team members represent the HQ whereas others represent branches. In addition, members faced threats to their identities within the company as a result of conflicts between different working cultures. Such feelings of low self-esteem have prevented employees of the subsidiary from identifying themselves with their teams. Under threatening conditions, teams with low social status will strive for survival, differentiation and the reduction of uncertainty. Subsequently, these struggles influence members' in-group behaviour and conflict handling behaviour.

#### **6.6.2 Team 5 in FORTUNE**

Employees in Team 5 were engaged in a number of co-located and virtual teams at the same time. The work they were doing as members of Team 5 was part of a temporary project and the team was to be dissolved upon completion of the project. Their inter-group boundaries were permeable and members of Team 5 had the opportunity to transfer membership to other teams. However, because virtual teamwork is common in the company and globalisation is inevitable in the energy sector, members showed no preference for working in co-located as opposed to virtual teams. As long as employees were working towards the same goal they could easily identify with any of their teams. As one manager observed:

*It is good to have a physical team but it is also important to have people who possess the expertise to deal with the issues. We work together towards solving the same problem and compare the result later. Sometimes working*

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<sup>4</sup> Most of the subsidiaries of PEACE are 100% owned by the company. Sometimes they are called agents and these agents may not be 100% owned subsidiaries. Any branch that is not from the principal trade can be called an agent. From the term 'agent', one cannot differentiate whether the agent is 100% owned or not. The UK branch, however is a 100% owned subsidiary of PEACE.

*with the same people in the same location for a long time, you feel bored and we lost the talent ... I have no problem and feel no difference working in either type of team.* (Manager of the Engineering Department, Female, aged 31-40, Brazil branch, FORTUNE)

However, because Team 5's project is temporary, team members have a different approach to handling conflict than if it were permanent. For example, when conflicts of interest or scheduling arise within the team, employees tend to take an adversarial approach and try to protect the interests of their local offices rather than striving for a collaborative solution. In addition, members of Team 5 do not see the necessity for spending time socialising with one another. An employee noted:

*If this project is on-going, I would spend time in social interaction. But if it is for six months and that is it, I don't think this is necessary... After the global specification is decided, I don't think we need to stick together again... We all have different requirements... our priority is to meet our own requirements first and the customers... Right now, our specification is close to Norway's and the UK's. The problem is Houston, because they have other suppliers that use another process that we do not agree on. Houston is working on its own procedures and we are working on ours... everyone is having its own procedures... we don't want to give in.* (Welding Engineer, Male, aged 31-40, Brazil branch, FORTUNE)

Evidence suggests that the need for affiliation and closer working relationships has driven this welding engineer to identify with his co-located team (see section 6.3). At the same time he did not value social interaction with members of his virtual teams even though such interaction would have helped him to develop a closer bond with his colleagues in the co-located team. The results highlight variations in employees' perspectives on working in co-located versus virtual teams.

The employees' adversarial attitudes have created conflict, one of which remains unresolved. Consequently, this has stalled progress on the team's project. The project was on hold for more than six months at the time when the researcher went back to conduct

follow-up interviews. No intervention or other conflict-resolution initiatives had been taken by the management; employees had the sense that the project was not important to the organisation. This effectively discouraged team members from committing to the project, as well as giving the message that the team had low social status within the organisation.

When the researcher asked people why the project was on hold, a male Lead Metallurgist (aged 31-40) in the Houston branch said that they did not have a strong leader and that no one in management was interested in the work the team was doing. He noted that he was unaware of whether he was formally being assigned by the management to the project. He further indicated that even the team leader did not understand the project mandate and had no intention of pushing it forward.

### **6.6.3 Team 6 in BATIK**

In Team 6, the project in hand is on-going. Conflicts were often caused by differences in culture and the language barrier. The boundaries between their group and others are, to a certain extent, impermeable because of the on-going nature of their project. Thus, this lower status group and its members do not react negatively to threats to their identities. When such threats occur, members tend to emphasise their role and contribution to their team. As an employee observed:

*Language barrier causes conflicts.... For me and my colleagues in Myanmar, English is not our first language. Sometimes the way we construct sentences is different from people in Singapore and this causes misunderstanding. They are better and more proficient in using English. However, we shouldn't judge people based on all these factors nor stereotype a certain group of people. I believe we are all important because of our contributions to the team... We are from the local area and we know where to source the goods at a cheaper price and with good quality.*  
(Purchasing Manager, Female, aged 31-40, Myanmar branch, BATIK)

A look at how this team's members approach problem solving suggests that employees dealt with conflict in a collaborative manner and conflict was often dealt with early on. A

female Purchasing Manager (aged 31-40) from the Myanmar branch indicated that during communication delays, she would immediately e-mail her colleagues to inform them about the cause of the delay. This team even took precautionary measures to avoid conflicts arising. An employee commented:

*In a shipping transaction, we would know the team performance by looking at the progress... meeting the deadline to ship goods to another country is a good way to judge our performance. Of course when there are external factors that cause delays that are beyond our control, we cannot say we are not performing because we are missing the deadline... Before conflicts occur, we all have responsibility to keep an eye on our progress and on a particular member that is likely to cause a problem. (Accounts and Administrative Executive, Female, aged 31-40, Malaysian branch, BATIK)*

When conflicts did occur, members of this team would refer to their archive of saved e-mails in order to identify where mistakes had been made so that they could rectify them. This is not to single out an individual to blame, but rather they did it in order to improve workflow in future. This practice was found to be useful in monitoring the efficiency of teamwork. Indeed, team members were aware of the benefit of solving conflicts collaboratively as part of relationship-building, which they also valued. As the Division Manager (Female, aged 31-40) in the Singapore branch put it, ‘sometimes what is done is done, you cannot undo it. I normally look into the mistake and find ways to improve the situation in the future’.

#### **6.6.4 Team 7 in DELIGHT**

The GHR Bulletin group (Team 7) compiles articles for the company’s General Human Resource (GHR) Bulletin on a quarterly basis. When data was being collected, Team 7 was compiling the November 2006 issue of the GHR Bulletin. The team was to be dissolved after the release of this issue, however it was highly likely that they would work together to produce further issues. So, although the project at hand was intermittent rather than continuous effort, team members knew each other from their work compiling the bulletin in previous years and as such they had built relationships among themselves.



Although compiling the newsletter was not considered important to the organisation, the research showed that team members had a different view. The leader illustrated how she had reconciled her perspective towards the project:

*Normally the HR of each branch will look after the local issues such as payroll, recruitment... It's always 'us' and 'me' and we do our own thing and you do yours. We hardly relate to one another. Having this HR bulletin, we are trying to get to know more about the happenings in other countries. It really strengthens the interactions among branches. Via this project, we form a group of all HR people and standardise some of our practices...*  
(Personal Assistant, Female, aged 31-40, Leader of Team 7, DELIGHT)

Some employees put more emphasis on their contribution to the team. They feel proud of their work whenever they achieve the group goal and enhance the team image. Like many other employees, this team member highlighted her contribution to the team in a way that enhanced her self-image:

*I identify with people that I cannot see because you tend to present the best side of yourself to them... I identify more with the HR team than with the company as a whole. We produce a very good bulletin so I feel proud to be part of the HR team. We want to bring out the best in the team. I don't really see that it's for the sake of the entire organisation but more for the HR team... We want to promote a good image of our team.* (HR Executive, Female, aged 31-40, Kuala Lumpur branch, DELIGHT)

With regard to conflict handling behaviour, team members tended to solve problems collaboratively. To prevent conflict, members tried to build up rapport and positive relationships with one another. To minimise gossip and increase productivity, some members made a conscious effort to keep their personal conversations short and instead focused only on discussing work-related topics. When conflict occurred, terms for discussion would be laid down and members would then exchange ideas and seek a common understanding. As an employee commented:

*Conflicts occur due to differences in viewpoints and opinions. When there is conflict, we lay down terms... I find that this is straight forward... Being a member of the team, we need to have a positive attitude and responsibility. If the thing is urgent, we need to deal with it and remind one another... (HR manager, Female, aged 41-50, Melaka branch, DELIGHT)*

Indeed, all of the team members indicated that face-to-face confrontation would be the last resort in conflict resolution. This is illustrated by the leader who would ‘try to solve the problem herself instead of troubling the person again. She would figure out how to work with the situation and lay it aside for the time being, letting both parties cool down to see what would happen next’.

## **6.7 Conclusions**

The research has explored how employees who are members of virtual teams are defined by group membership and how such self-definition has an impact upon conflict and effectiveness within a team. It was found that virtual teams are an ideal context in which to study employee identification with their colleagues and employer because the geographical disparity experienced by members of virtual teams means that psychological connection to their colleagues becomes even more important than for people working in co-located teams. Hence, employees’ identification processes can be understood by studying the degree to which they perceive and define themselves as part of virtual teams.

In an attempt to establish antecedents of team members’ identity, the results suggest that employees’ need for positive self-esteem, group affiliation and goal/achievement and the search for security all affected whether or not people were willing or able to identify with the virtual teams. This finding confirms the work of other researchers in identifying determinants to identification: identity needs (Ashforth and Mael, 1989), affiliation-related needs (Wiesenfeld et al., 2001; Mackie and Smith, 1998), goal/achievement related needs (Johnson et al., 2006) and the need to reduce the uncertainty faced in the teams (Hogg and Terry, 2000a; Fiol and O’Connor, 2005). The need for positive self-esteem is often achieved by developing more positive images of the self as an individual as well as the individual’s social status. Affiliation-related needs appear to be a greater enhancer for

employees whose job requires social interaction and public relations and those from countries where independent relationships at work are emphasised. Employees acknowledge the importance and advantages of virtual teamwork. Furthermore, they also acknowledge that it is essential for them to identify and work well with their teams.

Most employees did not identify as strongly with virtual teams as co-located ones because there is lack of clarity in both the coordination and in monitoring the performance of virtual teams. Although the results show no direct evidence that the need to reduce uncertainty in virtual teams is greater than in co-located teams, it was found that employees in virtual teams were searching for something in common on which to base a collective identity. Among the common attributes are values, cultural background and years of experience. The effect of demographic characteristics on identification within a virtual team are shown to be unimportant, but geographical distance can have a negative impact, especially on employees who believe that face-to-face interaction and socialising are important to good working relationships.

The role of management and ICTs seems to replace the visible and tangible cues which are used to promote identification. Management can help create a positive atmosphere among team mates by providing sufficient information about the background, attitudes and competencies of team members. Additionally, clarifying group goals and team members' roles strengthens the interdependence of a team's members, thus establishing a sense of unity and belonging. This sense of unity and belonging is further reinforced when work-based support is received from the management because employees enjoy closer working relationships and feel valued when receiving assistance and care.

The results indicate that the conflicts that occurred in virtual teams arise from difficulties in accomplishing work related tasks and are not generally related to personal issues. As virtual team members are geographically distanced from one another, conflicts arising from gossip and other face-to-face interactions are reduced. Instead, conflicts within virtual teams are generally caused by working cultural diversity, geographic distance, and differing values as well as by the miscommunications that result from members speaking different native languages and relying on ICTs to regularly communicate with one another. Conflict prevents employees from identifying with their teams, particularly when identity-based

conflict arises. Further, individuals facing the greatest threat to their identities are usually those who belong to a group/team that has low social status caused by power inequalities, working cultural differences, language barriers and projects which are generally perceived to be unimportant to the larger organisations.

When employees are faced with conflict that threatens a positive sense of self identity, they seek opportunities and strategies to improve their sense of identity. The strategies they choose depend on the social status perceived by the team members within the larger organisation, the degree to which inter-group boundaries of identity are permeable and the perceived legitimacy of personal or group status. The results show that employees who are members of a low social status group/team tend to focus on transferring their group affiliation to a group/team with perceived higher social status. In contrast, employees who are members of a higher status group/team identify more strongly with their in-group members and focus on maintaining the existing social status of their group or team.

In virtual teams, the permeability of inter-group boundaries of identity depends on several factors such as the life span of teams, the task characteristics and degree of difficulty of their assigned task, and whether or not members are engaged in more than one team at the same time. As data from this study shows, when group boundaries are impermeable, employees seek individual upward mobility and move to another team in order to try to improve their self-esteem. Nevertheless, some employees are willing to remain with their low status team and instead work together to protect or improve the social standing of the team. If however, inter-group status differences between teams are perceived to be illegitimate, such as if a virtual team's low social status is believed to be unjustly founded, then team members become frustrated and engaged in processes of social comparison in order to achieve or enhance their self-image. It was found that members of such teams display strong in-group biases in order to redress treatment of their group or team which they believe to be unfair.

Self-enhancement strategies have a significant impact on employees' inter-group and conflict handling behaviour. When conflict occurs, employees who are prepared to transfer their group membership to another virtual team would avoid confronting the conflicting party directly or conform to 'thoughtless' agreement in order to accomplish the task. Such

passive involvement in conflict is detrimental to the team because it means that problems are being hidden rather than dealt with. When employees cannot deny the low social status of their group/team, but still want to improve or protect their in-group identity, then they tend to deal with conflict collaboratively. Members are willing to put effort in resolving conflict or into compromising with their colleagues in order to reinforce the network of relationships involved in teamwork and to facilitate the accomplishment of the assigned tasks. However, if employees perceive and agree that the low social status of their group/team is undeserved or unjust, then they tend to adopt strategies of social competition, where one party tries to impose his/her idea or solution on the opposite party and disregard his/her perspectives, in order to reclaim a positive image of themselves and their group/team.

In conclusion, social identity incorporates an element of choice. Employees have the desire to establish a positive self-image. One way in which they do so is membership in a team that enables them to achieve personal and professional security and which satisfies their needs for identity, affiliation and goal/achievement. This research shows how employees respond to dissatisfaction with group membership and how they react to conflict. In general, employees of virtual teams with high social status are more satisfied with their membership in the teams than those teams of low social status. When employees perceive their group/team to have low social status, they are concerned with opportunities for improving their sense of identity. The strategies they adopt for identity improvement are influenced by a number of socio-structural characteristics such as the continuity of the teams and the number of teams in which employees are involved. These are strategies for enhancing and protecting the perceived social status, and have a significant impact on how employees deal with conflict within the virtual teams. The key findings will be related to the overall objectives of the thesis and discussed in more detail in the next chapter.

## **CHAPTER SEVEN: DISCUSSION**

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### **7.1 Introduction**

This chapter draws together and interprets the results presented in Chapter Six to establish whether they contradict, support or advance existing research. The conceptual framework outlined in Chapters Two, Three, and Four facilitates the description of the findings in conjunction with the aims and research questions. To recap, the main aims of the present study are to examine the identification processes in virtual teams and to see how these processes impact on conflict in the teams. The study first explored the factors that drive employees to identify themselves with their team and then examined the relationship between the identification processes and the inter-group behaviour that is associated with conflict in teams.

This discussion is divided into a number of sections according to the seven research questions listed in Chapter Four. The chapter begins with an analysis of employees' self definition, which is followed by a discussion of the determinants and factors which influence identification processes. The chapter progresses through discussions of virtual team members' cognitive and behavioural responses to conflict in their teams. To do this the chapter addresses first, their conflicts, particularly identity-based conflicts and secondly, the impact of self-enhancement strategies on members' inter-group and conflict handling behaviours.

### **7.2 Social Identity and Self-definition**

This section discusses the findings relating to Research Question One, i.e. 'How do virtual team members categorise themselves in and identify themselves with virtual teams?'. It focuses on how individuals define themselves through their membership in a virtual team. The social cognitive processes of identification are discussed.

The findings reveal that all employees define themselves in terms of their team-based memberships. Whether their self-definition is expressed consciously or not, the data

suggests that all employees have some degree of identity with their teams, but the source and form of identification varies with each individual. It was found that some members identify themselves more readily with the virtual team whereas others more readily with the co-located team. The association of the self with the team highlights the social component of identity which is derived from salient group memberships in general. In other words, virtual team identity is an example of employees' social identity being seen in the instances where they refer to the self in relation to the team(s). This finding confirms the basic conception of Social Identity Theory (SIT) that an individual's self conception is 'derived from his/her knowledge of his/her membership of a social group together with the value and emotional significance attached to that membership' (Tajfel, 1978, p.63).

Findings from Teams 1, 2, 3, 4 and 6 show that a strong sense of identity was found among members who had never physically met. This evidence refutes the claims of Burke and Chidambaram (Burke and Chidambaram, 1995; Chidambaram, 1996) that employees of virtual teams have weaker relational links to their colleagues than employees involved in physical or co-located teams. Furthermore, this evidence supports the proposition by Wiesenfeld et al. (2001) and Mansour-Cole (2001) that virtual team members primarily rely on psychological attachment to their team and their company. This evidence reinforces the cognitive emphasis of SIT which states that categorisation and identification in a team are based on the perceptual dimensions and that actual membership is not required (Tajfel, 1972; Tajfel and Turner, 1979).

The current study reveals a shift in how employees identify with their organisations and also that the choice of belonging to teams has become more complex and varied. All the virtual team members who took part in the current study also interacted with other employees who were team members of a variety of physical, co-located and virtual teams. This resulted in the creation of a variety of business or work relationships and subsequently work-related psychological attachments that occurred at more than one level in their organisation. For instance, members of a virtual team, but who were co-located in PEACE's UK branch had difficulty identifying with their virtual colleagues in Singapore. This finding supports the proposition by Webster and Wong (2008) that the 'degree of virtuality' affects team functioning. Because of the diversity and lack of shared context in

virtual teams, employees may have more positive perceptions of their 'co-located' colleagues than their 'virtual' colleagues.

However, not all of the employees identify more strongly with their colleagues in the co-located teams. Although the majority indicated a preference for identifying with their colleagues in the co-located teams rather than those in virtual teams, there were employees in Team 2 and Team 5 who indicated that they received greater satisfaction from their membership in virtual teams. Likewise, Team 7's members felt satisfied with their project work in virtual teams and found that their self-image increased if they achieved the team goal as a virtual team. Furthermore, some of them felt that they had better access to experts who were located around the world and that they had more freedom to manage their work tasks as members of virtual rather than the co-located teams.

Overall, a sense of identity is emerging in virtual teamwork that is influenced by its virtual context (Marks and Lockyer, 2005). Thus, it is important to explore the determinants that drive members to identify with virtual teams as well as the influence of the virtual environment on the corresponding identification processes.

### **7.3 Individuals' Needs as Driving Factors to Identification**

This section discusses Research Question Two, i.e. 'What are the possible motivational factors that drive virtual team members to identification in virtual teams?'. One of the central findings of the current study is that the determinants (those factors which drive motivation) of identification in virtual teams are influenced by a variety of individual needs. The extent to which the employees identify with the team depends on whether their basic needs can be fulfilled in such teams.

SIT proposes that belonging to a group enhances self-definition (self-esteem), and if dissatisfied then group members may wish to leave their unfulfilling group (see Chapter Three). Based on the findings of this study, it is also possible to identify other key functions of belonging to a group or team. These functions include the need to satisfy self motivation by team members by developing their interest in business strategy. Therefore, SIT has limitations when considering the impact of motivational differences on individuals'



identification with teams. This research has raised the possibility of recognising a wide range of motives associated with identification that affect collective behaviour in virtual teams. Other than the need for self-esteem, various individual needs and motivations were reported to be associated with identification in virtual teams. These include the need for uncertainty reduction, affiliation and goal/achievement. This result partly confirms the proposition of SIT, that individuals who belong to a group are primarily concerned with developing positive self-esteem (Tajfel, 1972).

The need for self-esteem and respect was found to be a determinant for identification in most of the teams. This supports the central assumptions of SIT that most employees identify more readily with the team if they achieve self-enhancement through positive self and social image (Ashforth and Mael, 1989). For example, employees in Team 4 identified strongly within the virtual team whenever their colleagues identified positively with them. In Team 7 some members felt that their social image was enhanced every time they achieved the group's goal as a virtual team. This made them feel good, wanting to belong to the team and working to secure further achievements. To most employees in Team 7, virtual teamwork was often viewed as a professional way of getting things done, so they felt proud of simply belonging to the virtual teams which they perceived to be distinctive. This finding agrees with the findings of Dukerich et al. (2002, p.509) that 'identification occurs when members consider worthy the central distinctive and enduring values and goals of the organisation, and incorporate these into their sense of self'. They further note that the 'image of the organisation influences members' identification'. Such image is the members' 'perception of the identity of their organisation and their belief of how the outsiders view their organisation' (Dukerich et al., 2002, p.509).

This same finding refutes Fiol and O'Connor's (2005, p.22) argument that the 'low visibility of membership' in virtual teams limits members' ability to see the teams as worthy and attractive, venues wherein they can be positively identified. They argue that this in turn causes team members to be driven less by self-enhancement needs and more by a need to reduce uncertainty. Although the current study makes no formal comparison between these two needs, it is reasonable to argue that team distinctiveness can often be shown through the ways others perceive and value its team members as individuals. Indeed,

virtual team members are constantly aware of and concerned with how other employees perceive them as members of a team.

As described in Chapter Four, people in teams have affiliation-related needs such as the desire for social contact or wanting to belong. Thus, they establish affection with the group or team to which they belong (Ellemers et al., 1999). There are two interesting findings that emerge from this study in relation to such affiliation-related needs. The first is that affiliation-related needs appear to drive the employees towards a greater motivation to identify with their virtual teams. This is particularly so for employees whose job requires social interaction and public relations such as sales and customer service personnel. Secondly, people from some countries emphasise the need for social communication to supplement the business relationships at work. These results reveal that most employees driven by the need for affiliation are those who love and enjoy social interaction. This finding confirms the proposition of Wiesenfeld et al. (2001) that team members who wish for a sense of belonging and social contact with others often show a strong organisational identification when their affiliation-related needs can be met in virtual teams.

Although the majority of employees who desire social contact or want to belong come from countries like China (e.g. Teams 2 and 3) and Singapore (e.g. Teams 1, 2 and 3), employees from Africa (e.g. Team 3), Brazil (e.g. Team 5) and UK (e.g. Team 2 and 3) were also motivated by affiliation-related needs. This finding only partly confirms the arguments by Hofstede (1980, 1983, 1991) and Triandis (1994) that in most Asian countries, people emphasise interdependent relationships and that this collective culture results in increased co-operation and lower levels of competition. Hofstede (1991) claims that for many Asians, and particularly the Chinese, harmony and conformity seem to govern their interpersonal relations; and maintaining good relationships with others is an important workplace value. However, the fact that African, Brazilian and the UK employees were found to be motivated by affiliation-related needs signifies that not all team members who desire social contact and relationship building are Asian.

Although the Brazilian employees in Team 5 indicated that they valued relationship building at work, it is interesting to note that social interaction and relationship building was perceived to be very important in co-located teams but not important in virtual teams

(see Section 6.3 in Chapter Six). This is because their virtual team would be dissolved upon completion of the project. Furthermore, the employees found that the ultimate purpose of getting together was to accomplish a project. It is therefore reasonable to argue that a strong affiliation may not lead to a strong identification with one's virtual team. Other factors such as the life span and changing of membership of the virtual team may affect an individual's identification in the team.

In addition, employees can be motivated to identify with the virtual team by appealing to their materialism. These material interests can be financial rewards, security assurance or opportunities for self-improvement (see Section 6.3 in Chapter Six). Most of the employees in the current study recognised and enjoyed the benefits of being in virtual teams because they fostered diversity and allowed for the pooling of resources. To some employees in Teams 2 and 3, for example, one of the ways to achieve material gain was to identify with their team members and work well with them. This result suggests that self development and extrinsic rewards can reflect work-related achievement satisfaction, which in turn helps team members to build work relationships and friendships with colleagues who are distributed around the world. This approach fosters their identification within the virtual teams. Even though rewards do not necessarily exert control over employees' collective behaviour, they may encourage them to stay focused and produce good performance at work (Vecchio, 1995). Often, rewards are also issued with relation to a yardstick which enables the employees to evaluate their organisation and in doing so allows them to compare themselves with others (Robbins and Coulter, 1996). Therefore, rewards can be seen as a goal and can be used to motivate employees in a way that not only benefits the individual, but also the team and the organisation as a whole. Individuals who are so motivated are likely to increase their desire to use their own attributes and skills. They are also more likely to identify positively with their teams.

The results of the current study demonstrate that employees did not identify or identified less with virtual teams because they felt uncertain in virtual teams. As an employee of Team 5 noted, virtual teams are not visible to outsiders and there is a tendency for teams that are 'out of sight, to be out of mind' (Chidambaram and Tung, 2005). Some employees in Teams 5 and 7 felt uncertain about the attitudes, beliefs, and feelings of their virtual colleagues, owing to the lack of physical cues and individuating information available

when communicating through ICTs. This finding confirms the suggestion of Fiol and O'Connor (2005, p.22) that the absence of physical and visible cues in the virtual settings 'heightens the need for uncertainty reduction'. Although no comparison was made in this study on whether the need for uncertainty reduction in virtual teams is greater than in other team settings, members in the virtual teams seemed constantly to be seeking out certainty and validation of their perceptions, attitudes, feelings and behaviour by identifying with their group members. In particular, the findings of the present study identify that shared interests and values, similarities in working culture, and a similar number of years of experience all attract team members to a particular group or team. Similarities in kinship, nationality, age, or gender however do not have the same pull (see Chapter Six Section 6.3.1).

The findings demonstrate that employees in Teams 1, 3, 5, 6 and 7 constantly sought certainty by identifying with their colleagues who had a similar function and value. One possible explanation is that these team members realised that virtual teams are often formed in response to having to achieve a specific goal, accomplish a task or solve a problem. They were aware of the benefits that diversity could bring in terms of knowledge sharing, and of the possible drawbacks if differences in demographical characteristics were highlighted. This finding confirms the argument of Postmes et al. (2005) that similarity of values (often reflected in a shared group goals and objectives) tends to help virtual team members change their abstract feelings of sharing the same fate in the virtual world into a concrete belief that they are actually working on the same task together. Therefore, a shared goal establishes the same ground for social identity. This ground reduces the relative negative impact of diversity in social categories with regard to identification (Gaertner and Dovidio, 2000; Brown et al., 2000).

It was found that virtual workers who engage in technical work such as the engineers in FORTUNE and PEACE tend to emphasise similarities in years of experience because they measure competencies at work based on experience that people possess in their profession. This suggests, as Hitt and Tyler (1991, p.333) have noted, 'the amount of one's experience may affect the strategic choices made and the models or processes used in making those decision. The type of experience may also affect one's cognitive framework and strategic choice. The virtual team members believe that the more experience one has, the better he or

she is in performing their job. Such perception affects the self-enhancement of members, especially those who have lots of experience at work, making them feel distinctive and proud. They then categorise themselves with those who possess similar years of experience in the same field.

Thus far, it can be summarised that employees' personal needs drive them to seek identification. These personal needs stem from a desire for self-esteem, to secure affiliation, to have a goal or achievement, and from the need to reduce the uncertainty faced in virtual settings. The findings from the current study reveal that other than the self-esteem built up through social categorisation and social comparison (proposed by SIT), objective goals or self-oriented needs also drive employees to identify with their virtual team. It is argued that team members can be motivated to identify with virtual teams if their psychological and physical human needs can be satisfied through their membership in the teams.

Members of each of the seven virtual teams studied were all motivated in different ways to identify with their colleagues. This stemmed from a number of factors including the nature of the business, the need for social interaction, and the length of membership in the virtual team. Consequently, different types of virtual teams serve different social needs. As presented earlier, virtual teams that emphasise social interaction and public relations tend to fulfil members' needs for attachment and belonging (e.g. Teams 2 and 3) whereas in task-orientated and problem-solving virtual teams like Teams 4 and 5, affiliation-related needs were down-played and instead achieving the group goals was the ultimate focus. This finding is consistent with Johnson et al.'s (2006) work on the relationship between social categories and the need for identification. One of their findings indicated that task groups are more closely associated with goal setting and achievement rather than affiliation-related needs.

To team members of the sales and customer service teams (Teams 2 and 3), identification meant an opportunity to practice interpersonal skills and to socialise with colleagues. On the other hand, to team members of Teams 4 and 5 which focus on problem solving, identifying with the virtual team was perceived as a way to enhance self-image. When working with experienced engineers, these employees were able to tap into the knowledge and working experience of other team members and this enabled them to achieve group

goals and gain personal rewards. This suggests that, as Deaux et al. (1999) and Johnson et al. (2006) also note, every team has its own psychological needs and its own approach when it comes to the way it motivates people. Such differences are also reflected in how team members identify with their team. Although the current research does not investigate the relationship between the purpose of the virtual team and the motivational needs of its team members, the results provide a baseline model of a team classification based on a variety of motivations associated with team identification.

When it comes to reducing uncertainty team members tend to categorise and identify with those who are perceived as similar. The similarities that team members look for are based on the teams' values as a whole and team members' years of experience. This confirms the claims of Hogg and Terry (2001) that the uncertainty faced in virtual teams can be reduced when there is an assumption of agreement or similarity found among the team members. The ways in which uncertainty in virtual teams is reduced shows that social identification relies on similarities, but not necessarily at the expense of the out-group. That is, people categorise and distinguish their in-group(s) from the out-group(s) with which they deal by making comparisons and evaluations between themselves and others in a way that is favourable to the in-group. As a result, they improve their self-image (Tajfel, 1978). This study found that in Teams 1, 3 and 4, it is the fulfilment of self-interest like financial security, knowledge development and skill enhancement that drives members in these virtual teams to improve their identification with their team. For this to happen there is no necessity to have both an in-group and out-group by way of comparison. However, making comparison between in- and out-groups becomes a more important issue when team members face conflicts that lead to identity threats (as discussed in Section 7.6). In brief, the findings of this study partly support the argument of SIT that social categorisation leads to differentiation from the out-group. Employees do not necessarily compare the in-group and out-group in order to feel good about their own group or team. Positive identification within a virtual team can occur when the team fulfils the specific needs of its team members and when the team perceives itself as consisting of similar-minded team members. Therefore, it can be argued that intra-team processes can lead to team identification. That is, members can identify with their colleagues without referring to out-group members. The out-group may have an influential role in the identification processes, but this is not always the case.

#### **7.4 Impact of Diversity in Social Groups, Culture and Location on Virtual Team Identification**

This section focuses on Research Question Three listed in Chapter Four, i.e. ‘To what extent do the virtual settings impact on virtual team members’ motivation to identification?’. When conducting the investigation on the determinants of identification, the unique contextual and situational factors in virtual teams were taken into consideration. The earlier assumption of this study (see Section 4.6.1 in Chapter Four) was that any diversity in social categories, culture or location made it more difficult for virtual team members to identify common traits amongst team members or to establish and reduce uncertainty in their teams.

It is interesting to note that the results report that diversity of demographic traits such as nationality, age or gender has an insignificant impact on team members’ identification in virtual teams. Conversely, diversity in working culture and language prevents team members from identifying with the virtual teams. As presented in Section 6.3.3 in Chapter Six, the majority of employees of PEACE, BATIK and DELIGHT did not necessarily seek to identify with people of the same national background. Yet, differences in working culture, such as contradictory interpretations and approaches to handling events contribute to the formation of employees’ stereotypes about a particular race or nationality. Often, the negative preconceptions of others affect team members’ identification. This suggests, as Dash (2001), Alexander (2000) and Cascio (2000) put it, that differences in culture often lead to conflict when common understandings are lacking. When conflicts remain unresolved, team members tend to develop negative stereotypes towards people from other countries and to distrust one another.

Indeed, the current study demonstrates that the stereotypes formed among the virtual team members reflect some of national stereotypes. For instance, employees of the UK branch in PEACE addressed colleagues from the East as ‘collectivists’ and ‘workaholics’, whereas employees of the Singapore HQ described their colleagues from the West as ‘individualists’ and ‘not so dedicated to work’. Although this finding partly supports Hofstede (1980) and Triandis’s (1994) study of national culture and their assertion that individuals thought processes are influenced and developed through their day-to-day life and experience and

that their mindset is influenced by their national culture, the current study has effectively identified the danger of Hofstede's (1980) conventional comparison between the people from Eastern and Western countries. Such comparison has produced a broad-brush assumption that all Eastern or Western countries are similar and therefore should be culturally grouped and labelled as one category. In this study, it was found that not all people from Western countries are 'individualistic'. For example, a European employee in Team 2 recognised the importance of establishing relationships at work and she had a strong desire or need to belong.

This current study has theoretical bearing for the discussion on whether national culture has a strong influence in workplace relationships (Hofstede, 1980). It is particularly relevant for understanding virtual teams where the workforce is comprised of people from across the world. It should be born in mind, however, that this study has limits as only a small number of virtual teams was studied. Thus, more research needs to be carried out, particularly into virtual teams that are located or partly-located in Africa, Latin America and central Asian countries.

The language barrier was found to have an impact on identification as a result of both oral and written communication. Language can form a barrier particularly for employees who rely heavily on e-mail to communicate with colleagues, as in the case with team members who are physically separated by long distances such as employees of PEACE, FORTUNE and BATIK, but not so much for team members whose projects are non-operational, which require minimal interaction over the phone, such as employees in Team 7.

Different approaches to writing e-mails can triggered misunderstandings and cause offence between virtual team members. For example, some employees in the HQ of PEACE would capitalise words for emphasis, but people in the UK branch often interpreted this as 'shouting'. Words and phrases used can cause misunderstandings and lead to the formation of stereotypes about the personalities and working attitudes of other employees. Furthermore, it is interesting to note that there are constraints in using one language when team members have different first languages. This can affect team members' sense of belonging and identification within the virtual teams. For example, the UK employees in PEACE felt isolated and excluded from their colleagues in China because they could not



communicate with them in Chinese. Yet, the Chinese could communicate with them, at least to some degree, in English. The UK branch often had to ask for help from their local Chinese-speaking colleagues in communicating with their colleagues in China, which made British team members feel inadequate.

In Chapter Four the assumption that proximity may have a negative impact on team members' identification within the virtual team, particularly for members who engaged in virtual and co-located teams simultaneously (see Section 4.6.1 in Chapter Four), was explained. In the current study, not all virtual team members were found to have been affected by close proximity with members in co-located teams. The impact was only profound for people who emphasised social interaction at work or for individuals who were engaged in projects where face-to-face discussions and negotiations are necessary or desirable. The data suggested that physical proximity was directly beneficial to team identification because it allowed for socialisation and the sharing of visual cues during communication. These cues include facial expressions during communication, dress code and readiness to respond. Employees tended to identify less with virtual teams when social interaction and face-to-face meetings were lacking. This was particularly true of employees in PEACE who were engaged in sales, and those, like Chinese employees in PEACE and the Brazilian employees in FORTUNE, who viewed building relationships at work as necessary to organisational success.

As stated above, the fact that virtual team members may also be working in co-located teams caused them to identify more strongly with the local office rather than with their virtual team, as was the case with Team 2 and Team 5. As some employees indicated (see Section 6.3.4 in Chapter Six), face-to-face meetings and 'water-cooler' chats provide members with an informal atmosphere infused with rich social and physical contact that may be useful for employees trying to gain a better understanding of the characteristics of the team. This finding confirms the results of Armstrong and Cole (2002) who stated that employees in virtual teams have a stronger sense of sub-group identification with colleagues who do not work in their virtual teams, but with whom they work in the same local office. The 'home-group' relationship structure owes its existence to close working proximity between employees. It creates a shared context that is likely to promote informal and spontaneous identity among the employees.

Advanced information and communication technologies systems are used whenever possible to improve communication in virtual teams. It is interesting to note that although some virtual teams studied here have been supplied with teleconferencing and video-conferencing systems in order to help them replace face-to-face meetings, employee identification is still very much negatively affected by long-distance communication. Team 5's members in FORTUNE provide the best example of this. Their virtual team had use of a high-tech video conferencing system costing £20,000. It was found that most virtual team members were still sceptical about the benefits that the system could offer. Firstly, some team members indicated that the system was not user-friendly. Secondly, they felt uncomfortable speaking to their colleagues via computer screens. Thus, teleconferencing and phone media were chosen for discussion instead, relying solely on the oral media.

However, teleconferencing and phone media have limitations because often the topics of conversation are complex issues requiring a great deal of discussion and negotiation of technical details. Without visual aids, it becomes more difficult for employees to accurately describe the issues to one another. Furthermore, technical difficulties occurred with the ICTs arise such as high/low noise level or the cessation of the signal. As found in the current study, virtual team members who come from non-English-speaking countries in Africa, Latin America, and Asia have even greater problems using ICT, as it can be difficult for them to understand English that is not clearly spoken. Nevertheless, it must be recognised that teleconferencing may only be the option for virtual team working in many third-world countries because they often have limited computer and ICT facilities.

As discussed in Chapter Four, the tools chosen for communication can have a substantial effect on the quality of communication. Earlier research has found variation in the impact of ICTs on members' identification within virtual teams. Pratt et al. (2000) indicate that using rich media saturated with information about social context, such as that found in video-conferencing, improves communication in virtual teams. However, Rockman (2008) and Fiol and O'Connor (2005) do not agree - they believe that such rich media may have a negative impact on 'true' virtual teams (termed as 'pure' virtual teams by Fiol and O'Connor, 2005) in which no one engages in face-to-face contact. They argue that the use of rich media ICTs highlights sub-group differences among the team members. A sample of the current study includes a mixture of employees who had face-to-face interaction and

those who did not. All of the virtual employees in this study were working with co-located teams on their home site, so no one was completely isolated. Thus, this research was not able to examine the impact of rich media on pure virtual teams. However, it is not unreasonable to conclude that communication affects employee attitudes when they identify themselves with their virtual teams, because different communication media possess properties that bring differing implications for the development and maintenance of identification (Wiesenfeld et al., 1998). As the data from this study demonstrates, ICTs such as e-mail and the telephone are more accessible and informal than video-conferencing. It was also found that the informality of electronic-mediated technology is believed to break down the perceived hierarchies and to promote feelings of equality. This in turn may lead team members to feel that they can actively participate in the social process of establishing and sharing identity.

Differences in what team members think about the team's task, goal, target or mission have had an impact on achievement of a conceptual similarity within the team. This was particularly true of teams in multinational organisations (See 6.3.2 for the findings of PEACE, FORTUNE and BATIK). In multinational organisations, distinctions are often drawn between the global organisation, its local subsidiaries, and/or different branches of the organisation. Such distinctions arise when team members hold different ideas as to what their method of operation is.

This finding confirms earlier evidence that most virtual team members identify with colleagues who have similar values (e.g. Teams 1, 3, 4 and 6). It is then argued that expressing similar values through shared team goals binds members of virtual teams together. Virtual team members feel that their success relies on team effort and this belief leads to a heightened sense of unity, makes team achievement more important and thus fosters team identification.

Several key points on the impact of the virtual context on identification have emerged from the discussion above. Firstly, although members represent many nationalities, the results of the current study have shown that demographic variables such as nationality, age and gender have only limited influence on virtual team identification. Furthermore, there is no noticeable connection between virtual team identification and employee preference for

working with colleagues who have the same or a similar national culture. However, it was found that team members are more concerned about the differences between themselves and their colleagues when it comes to variations in working methodologies and approaches than between different working cultures. Such differences are more likely to lead to conflict in the workplace and in the virtual team than differences of nationality. In other words, diverse working values can have a profound impact on members' identification within virtual teams. This causes variations in how team members approach their team's real task, goal, target or mission and as a result it tends to negate team members' sense of unity and undermines attempt to create shared meanings. This is especially true in virtual teams whose purpose is the development of a common vision and team goal. Within their virtual teams, team members tend to work at transcending cultural differences in order to achieve a common goal.

Finally, the findings reveal that having great geographical distances between virtual team members has a greater influence on team members who were involved in sales, team members who emphasised social interaction at work, or team members who engaged in projects where that require face-to-face discussions and negotiations. They sought the social interaction in virtual teams that they have become used to in their business environments.

## **7.5 Role of Management in Promoting Virtual Team Identification**

This section presents findings for Research Question Four, i.e. 'What is the role of management in promoting identification in virtual teams'. The role of management was found as an important intervening factor in promoting identification in virtual teams. The data presented here demonstrates that employees' perception about their colleagues strongly influences their identification in virtual teams. Therefore, management's role in providing relevant information about fellow teammates, in clarifying team goals and individuals' roles, and in providing sufficient work-based support is important to the development of positive perceptions amongst the team members. Management's role is to support virtual teams so that they can mirror as closely as possible the operation standards of the co-located teams.

As reported in Section 6.3.5 in Chapter Six, most employees in Teams 3, 4, 5, 6 and 7 showed an interest in their colleagues and wished to demonstrate good behaviour when interacting with their virtual team mates. They did this in order to enhance the quality of their working relationships. It was found that most team members of Teams 2 and 5 constantly sought information about their colleagues. Any news about what was happening at other sites, or any information which would give them further knowledge of the virtual teams and their virtual team members, helped them not only to develop an interest in other sites but also to develop trust and confidence within their virtual teams. This helped reduce uncertainty within Team 2 and Team 5.

Looking again at the example of the metallurgist in PEACE, demonstrates that information about virtual team members' backgrounds, their expertise and capability shaped their perception of these team members. The metallurgist had difficulty identifying with colleagues that he did not know. He also indicated that one of the main reasons for participating in the project was that he knew some of the team members and that they had good reputations in the organisation. As Jarvenpaa et al. (1998) suggest, individuals rely on information in order to develop perceptual elements by which they define or characterise the team. Often, knowledge of these defining elements of the team results in it becoming a stable entity with which members can identify. This can have a significant impact on the strength of employee identification (Fiol, 2002; Turner 1987).

Where there is little or no background information for virtual team members to rely on, then colleague interactions will be restricted to work-related topics, namely discussion of the job in question. In such circumstances, team members find themselves having to rely on their colleagues' integrity, experience, and general ability in order to categorise themselves with the virtual team as whole. Thus, having a good potted history or encouraging social interaction as a preamble to business means that employees have more opportunities to develop positive virtual team identification.

In all the companies chosen for the present study, social interaction and communication over the phone had been encouraged by management in order to improve team spirit and identification. Most members in the virtual teams within PEACE, FORTUNE and BATIK had indicated how this type of managerial support had an effect on their identity and their

sense of team membership. This suggests, as other researchers found (e.g. Pratt et al., 2000; Rock et al., 2003; Sproull and Kiesler, 1991, 1986; Suzuki, 1998), that when management supports high-quality communication among virtual team members, then these members are able to feel the positive presence of their virtual team mates. This in turn enhances the work experience through the development of a shared interpretive context which fosters identification among the virtual team members.

To further promote team identification, PEACE and DELIGHT used face-to-face meetings to sustain high-quality communication and strong ties amongst virtual team members, as these meetings allow for the team members to meet and interact with their distributed colleagues. This approach helps virtual employees to cement business relationships, and may well be combined with other important business meetings. Overall, such arrangements are desired by most of the virtual team members. They found that communicating face-to-face is better than using ICTs, because the former is more personal and direct and it encourages two-way communication. In virtual teams where face-to-face interaction occurs regularly there are more chances for team members to share personal information with and about their colleagues. This in turn often contributes towards the development of a strong virtual team identity.

The current study identified the need to define the virtual team's goals, aims and objectives clearly in order to carry out its work satisfactorily in a given time period. The knowledge of the defined goals leads virtual team members to identify with and to commit to their virtual team. In Teams 1, 2, 3 and 6, clearly setting out guidelines on work procedures along with the clarification of roles was often correlated to high levels of job satisfaction and team attachment (see Chapter 6 section of 6.3.3). This result confirms the findings of Ashforth and Mael (1989) who state that when employees have a clear idea of the team goal then they also have a clearer picture of their role within their teams as well as what their responsibilities are and what they are expected to contribute. As found in the current study, knowledge of the team goals leads to greater confidence at work and enhances employee self-worth and self-image as virtual team members.

This study shows that the quality of social support which employees receive at work has a significant impact on the way that team members identify with their virtual teams. This

social support may come either from the larger organisation or from within the virtual team itself. Most employees in PEACE were motivated to work and identify with their virtual teams because of the positive support received from other team members. They enjoyed working with their virtual team because of members' willingness to assist one another at work. For example, one of Team 2's members, located in PEACE's HQ, said that the lack of support she received from colleagues in the UK branch caused her to identify less with them as compared with colleagues in her co-located team, who she felt were supportive.

Social support received from the management is also seen as essential. Interviews with team members of Teams 3 and 4 revealed that a high level of tolerance for mistakes encouraged employees to identify with the virtual teams. Meanwhile, interviews with Teams 6 and 7 shows that employees were also encouraged to identify themselves with their virtual teams when management provided them with rewards and recognition. These team members felt valued and important when assistance and care were received from their superiors and the management. Conversely, Team 5's project had to be put on hold for more than six months during the time of data collection for this research because the project received no management support, which damaged employee commitment to their project and their virtual team.

It can be concluded, therefore, that virtual team morale and virtual team identification is boosted when employees receive both social and management support. The results of this study support the proposition of Wiesenfeld et al. (2001) that social support at work is an important means by which management provides visibility of group membership in virtual teams, which in turn promotes identification in the teams.

## **7.6 Conflict in Virtual Teams**

Apart from highlighting the identification processes in the virtual teams, the study aims to explore the impact of such processes on conflict. This section deals with Research Question Five, i.e. 'What are the possible conflicts that arise in virtual teams and what factors cause such conflicts?'.

The analysis reveals that conflicts that occur in virtual teams tend to be task and process orientated rather than interpersonal conflicts arising from ‘perceived interpersonal incompatibilities and clashing personalities’ (Hinds and Mortensen, 2005, p.292). That is the conflicts in virtual teams tend to be disagreements over task content or the process involved in completing the task. Based on the interview material, most employees in PEACE avoided using the term ‘conflict’ and instead preferred to use euphemisms such as ‘misunderstanding’ and ‘variation in perspectives’. These employees indicated that conflict in the virtual teams stemmed from misunderstandings in work-related issues and not for personal reasons.

However, it is interesting to note that task and process conflicts can be either constructive (enabling members to compare different approaches to a problem) or negative (having a damaging effect). If conflicts, particularly negative ones, are not well managed, they can adversely affect relationships to such a degree as can be detrimental to virtual team performance, as happened in Team 3 in PEACE. Unresolved conflict can cause feelings of bitterness, which in turn often impose negative and perhaps unreasonable preconceptions on the parties involved and discourage team members’ desire to continue positive identification (Eckel and Grossman, 2005; Cramton, 2001). For example, the unresolved task and process conflict which occurred between some employees of the UK branch and the HQ in PEACE’s Team 1 and Team 3 led to negative stereotypes or negative impressions as well as interpersonal tension that caused anger, frustration and distrust among colleagues (see Section 6.4 in Chapter Six).

In addition to task and process-based conflicts, this study identifies identity-based conflicts, i.e. conflicts resulting from identity tension. This type of conflict occurs when members face identity threats during their identification processes. When the conflict occurs, the identity of the virtual team members can be threatened in several situations. For instance, the inequality in power distribution (e.g. between the Singapore HQ and the UK branch in PEACE); the inferiority feelings resulting from the nature of the project (e.g. Team 7 in DELIGHT); the lack of support received from the organisations (e.g. Team 5 in FORTUNE); and the language barrier (e.g. Team 6 in BATIK and Team 3 in PEACE). The ways in which the virtual team members protect or improve their sense of identity as well



as their cognitive and behavioural reactions to identity-based conflicts are discussed in the following sections.

## **7.7 Self-enhancement Strategies, Influencing Factors and Team Members' Cognitive and Behavioural Responses**

This section focuses on Research Question Six – ‘How do virtual team members react to and deal with conflicts arising in virtual teams?’ and Seven – ‘What are the factors that influence the choice of self-enhancement strategies and how they relate to virtual team members’ behaviours associated with conflicts?’. Under this section, sub-section 7.7.1 presents virtual team members’ responses when facing conflict in terms of identification, followed by sub-section 7.7.2 a discussion of the factors that influence their choice of self-enhancement strategies. Finally, the effect of such strategies on the virtual team members’ perception and inter-group behaviour is discussed in sub-section 7.7.3, and the effect of the strategies on their conflict-handling behaviour is discussed in sub-section 7.7.4 respectively.

The relationship between the variables of Research Questions Six and Seven, i.e. the responses of virtual team members when facing identity tensions, the permeability of inter-group boundaries for identity, the self-enhancement strategies, virtual team members’ perceptions, inter-group and conflict handling behaviour after adopting the self-enhancement strategies, are displayed in Figure 3.

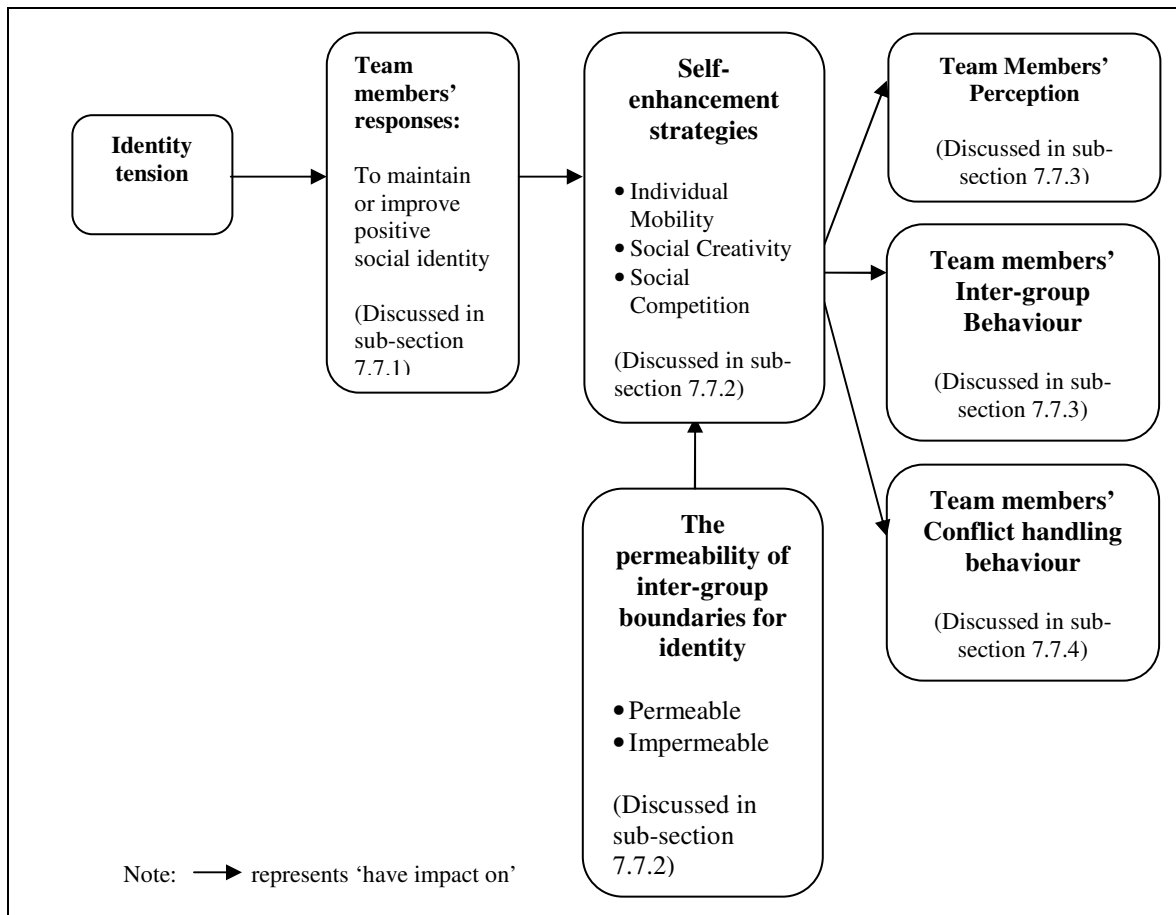


Figure 3: The impact of the permeability of inter-group boundaries for identity on self-enhancement strategies and the effect of such strategies on virtual team members' perceptions, inter-group and conflict handling behaviour.

### 7.7.1 Reactions of Team Members When Encountering Identity Tensions

The current study reveals that employees constantly seek to enhance their identity by using different strategies to gain a positive self-image. It was found that when virtual team members are attracted to a team by its distinctiveness and prestige, then they are more likely to feel like a positive part of the team and they tend to have a positive self-image and sense of self-worth. Under these circumstances they also wish to identify more meaningfully with their team. For example, team members in Team 7 of DELIGHT identified with their virtual team because they found that their self and social image was enhanced whenever the team achieved its group goal. This increased members' commitment to the virtual team as they wished to continue working to achieve the team's aims and objectives in order to maintain a positive identity.

Likewise, virtual team members in the Singapore HQ of PEACE identified strongly with their colleagues in co-located teams, as they were satisfied with their memberships in those teams. They were proud of their social status as representatives of the HQ and wanted to maintain its exclusivity. They often addressed themselves as people with a higher role and rank in the organisation, who were tasked with educating employees in their branches and with high-level decision-making (see Section 6.6.1 in Chapter Six). This supports the fundamental assumption of SIT that individuals constantly strive for positive social identity and that they desire to attach themselves to a group/team that enhances their self-conception (Tajfel and Turner, 1979).

The virtual team members of the UK branch in PEACE, on the other hand, perceived that there was an unequal division of power with regard to decision making between the HQ and the UK branch that caused employees in the UK branch to feel inferior. Although the UK employees were given a certain degree of freedom to make decisions, all final decisions were referred to and controlled by the HQ. Obviously an HQ drives monitoring, disseminating information and introducing standard procedures such as financial, administrative as well as recruitment and selection procedures. How the HQ carries out these tasks depends how they are seen by other parts of the organisations. A helpful, understanding approach supported by effective explanations would be accepted much more readily than having an authoritative attitude. The former approach engenders a strong positive relationship between the HQ and the branches and creates an atmosphere of mutual aid, whereas the latter can trigger feelings of inferiority and insecurity among branch employees. In the case of PEACE, members in the UK branch often felt that they were being treated as ‘secondary’ employees who were not being heard.

For different reasons, a feeling of inferiority also existed in Team 5 of FORTUNE. This team received no management intervention and this caused its virtual team members to feel that their team was not important to the organisation. These resulting perceptions and feelings have an impact on individuals’ identification within their virtual team.

### 7.7.2 The Influencing Factors - Permeability of Inter-group Boundaries for Identity and the Self-enhancement Strategies

This sub-section discusses the permeability of inter-group boundaries for identity impact on virtual team members' choice of self-enhancement strategies and the discussion is based on Table 9.

Examples of virtual team	The permeability of inter-group boundaries for identity	Self-enhancement strategies
Representatives of the Singapore HQ in Team 1, 2, 3, and 4 of PEACE	Permeable	Status protection
Team 5 of FORTUNE		Individual mobility
Representatives of the UK branch in Teams 1,2,3 and 4 of PEACE	Impermeable	Social creativity
Team 6 of BATIK		
Team 7 of DELIGHT		
Representative of the UK branch in Teams 1, 2 and 3 of PEACE	Impermeable	Social competition

Table 9: The impact of permeability of inter-group boundaries for identity on self-enhancement strategies in virtual teams

In SIT, the feasibility of changing employees' psychological attachment from one group/team to another is described as the permeability of the inter-group boundaries for identity (Tajfel and Turner, 1979; Ellemers, 1993). In this study, it was found that opportunities for enhancing identity in another group/team depend on factors such as the life span and continuity of a virtual team and whether the members are engaged in work with more than one team at a particular time. More specifically, it depends on whether the virtual team is administrative, service-orientated or emergency-related, as well as whether the team is ad-hoc (short term) or permanent (long-term).

When the employees are engaged in a permanent virtual team, there is a high possibility for them to further their term of office to work in that team, thus their membership within that

team seem to be unavoidable. Furthermore, when virtual team members are engaged in only one team, obviously alternatives available for them to change their membership to another team are limited or non-existent. For example, although the employees in the UK branch of PEACE were engaged in co-located teams and virtual teams simultaneously, they had fewer opportunities to change their team affiliation than did team members based in the Singapore HQ. Employees based in the UK branch are restricted to participating in virtual teams associated with Far East Europe Service (FES). Furthermore, Teams 1, 2, 3 and 4 of PEACE are all on-going teams that handle highly operational or transactional projects which means that they are more likely to work together over a long period of time. Because the operations of all fully owned branches or subsidiaries were controlled by the Singapore HQ, the branches were bound to work closely with the HQ at all times. Therefore, it is reasonable to assume that identity boundaries of UK branch employees were to a certain extent impermeable. As such, although team members in the UK branch may encounter an identity threat within their virtual team, it seems inevitable that they would continue to identify themselves with their virtual teams in order to work efficiently in the long term.

Similar dynamics between branches and HQ were observed in virtual teams working in BATIK as well as DELIGHT. Team members of Team 6 in BATIK were engaged in an operational virtual team that was involved with shipping logistics and they were an on-going team during the period of this research. The inter-group boundaries for identity were considered impermeable. Only one of the three virtual team members in Team 6 had a good command of English, the working language. This meant that language barriers often led to conflicts and feelings of inferiority amongst the two other team members who could not communicate well in English.

Likewise, team members of Team 7 of DELIGHT viewed their virtual team as having low social status because of the nature of their project - compiling quarterly issues for the General Human Resource (GHR) bulletin. As this project was in-house publication and involved no operational activities, it was considered to be somewhat unimportant to the organisation's management by these virtual team members. Although virtual team members felt unhappy with their social position within the organisation, they tended to find ways to improve or protect their identity within their virtual team because Team 7 was an on-going virtual team. Representatives of each branch appreciated that they were expected to take

part in compiling future issues of their publication – unless they were allowed to be exempt due to reasons acceptable to the management. As mentioned before, members' inter-group boundaries for identity were considered impermeable.

The examples above show that when the inter-group boundaries for identity are impermeable then team members have no opportunity to change their team membership and affiliation. As Tajfel and Turner (Tajfel, 1978; Tajfel and Turner, 1979) argue, if change or movement to another group or team is impossible, then members tend to implement social change within their team. For example, they work as a collective to change the status of their team. They engage in these collective activities in order to secure positive social identity. Such changes are made possible through the use of social creativity where team members alter the dimensions of social comparison so that in-group evaluations will become positive.

Although these team members were dissatisfied with their association with and role within their virtual teams, their need to cultivate positive identity caused them to adopt collective strategies in order to improve their team identity. As suggested by Ellemers (1993) and Hogg and Terry (2000a), individuals use social creativity to improve their team identity, whereby they try to change and improve their team's image and the prestige of the team, and improve the performance thereof.

On the other hand, when the inter-group boundaries for identity are permeable, then team members look for alternative groups or teams to belong to. They change group or team affiliation and attachment to that group or team in order to gain a more positive identity (Tajfel and Turner, 1979). This happened to Team 5 of FORTUNE where employees often compared their membership in this virtual team with membership in co-located teams or with membership in other virtual teams. Members in Team 5 were more likely to identify with teams that they felt comfortable with. Team 5 would be dissolved upon project completion, so team members' inter-group boundaries were considered permeable – employees could easily believe that they could improve their identity as members of different virtual teams in the future. In SIT, such a reaction or strategy is called individual mobility (Tajfel and Turner, 1979). As Tajfel and Turner (1979) argue, individuals are able to reinstate their positive identity using the strategy of social mobility when the inter-group

boundary for identity is permeable. In other words, it is possible for the team with low social status to gain a more positive identity through changing their membership by moving to a team with high social status. This change is feasible, provided there are no obstacles. Thus, it could be argued that the desire to move from a low status teams precedes the actions taken to do so - actions such as putting in a request to management for a transfer.

It is interesting to note that most members of PEACE's HQ believe that their self conception would not be enhanced by identifying with colleagues in the UK branch, because the subsidiary or branch was a regional office that did not possess as much authority or power as the HQ. As a result, virtual team members located at the HQ place a very high value on their memberships of their team(s) based in the HQ. Again, this finding verifies the claims of Tajfel and Turner (1979) and also confirms the observations of Ellemers's (Ellemers, 1993; Ellemers et al., 1988) that individuals tend to identify more frequently with positive social categories that enhance their self-esteem, and avoid identifying with those that do not. This is a strategy used to protect a positive identity and what Tajfel and Turner (1979) call status protection.

The strategies used to enhance positive identity within the virtual teams were demonstrated in members' perception, inter-group and conflict handling behaviour within the teams, which is discussed in detail in the following sub-sections.

### **7.7.3 Self-enhancement Strategies and Team members' Cognitive and Behavioural Response**

The discussions of this sub-section and the next, i.e. 7.7.4 are based on Table 10 which displays the impact of self-enhancement strategies on team members' perception, inter-group and conflict handling behaviour.

<b>Examples of virtual team</b>	<b>Self-enhancement strategies</b>	<b>Team members' perception</b>	<b>Team members' inter-group behaviour</b>	<b>Team members' conflict handling behaviour</b>  (will be discussed in sub-section 7.7.4)
Representatives of the HQ in Teams 1, 2, 3 and 4 of PEACE	Status protection	Perceive the low status group as 'out-group' and 'them'  Happy to remain in their group	Distancing from the members of low status group  Reduce social interactions	Collaboration behaviour (motive: to show their superiority in status)  Competitive behaviour  Avoidance behaviour
Team 5 of FORTUNE	Individual mobility	'Don't fit in': Feeling of being a square peg in a round hole	Attitude of 'unwilling to give in' when it comes to decision making	Competitive behaviour
Representatives of the UK branch in Teams 1, 2, 3 and 4 of PEACE	Social creativity	Change the initial negative perception towards the out-group to positive  Deny 'conflict' and delineate it as 'difference in perspective'	Take initiative to build relationship, improve communication and seek common understanding	Collaboration behaviour  Compromise behaviour
Team 6 of BATIK		Believing their role is progressing according to plan	New policies and rules were suggested and drafted to improve the future workflow	Collaboration behaviour  Compromise behaviour
Team 7 of DELIGHT		'We are better off as compared to other management practices in the organisation'	Draw up new dimension for inter-group comparison	Collaboration behaviour
Representative of the UK branch in Teams 1, 2 and 3 of PEACE	Social competition	Perceive the high status group as 'out-group'	Open defiance and distancing (e.g. reduction in or refusal of social interactions)  Non-compliance (not replying e-mails)  Open hostility (refer the conflict to the top management and copy to all other members)	Accommodation behaviour  Avoidance behaviour

Table 10: The impact of self-enhancement strategies on virtual team members' perception, inter-group and conflict handling behaviours



As described in the previous sub-section, most employees in PEACE's HQ wanted to retain their membership in the teams based in the Singapore HQ. As a result, they often referred to their co-located colleagues as 'us' and called UK based colleagues 'them'. This was particularly evident in Teams 1 and Team 2. Employees in the HQ did not consider colleagues in the UK branch as part of the organisation's 'big family'. Instead, they tended to build stronger ties with their co-located colleagues and avoided developing close working relationships with colleagues in the UK branch. This finding confirms the proposition of this study (see Section 4.5 in Chapter Four) that when an individual encounters an identity threat in a group or team, then the group or team that appears to be unfavourable to the employees is regarded as the 'out-group' and is considered to be 'other'. Also, this finding is consistent with the findings of Brewer and Kramer (1986) as well as Dalton and Chrobot-Mason (2007), which state that when members encounter an identity threat in their group or team, they tend to develop positive bias (favouritism) towards their in-group and this positive bias can evolve into prejudices (such as dislike and even hatred) towards the out-groups. Indeed, it was such in-group bias that brought a negative impact from virtual team members of the UK branch towards their HQ colleagues, reflected in the resulting identification within the virtual teams.

Different tactics for social creativity were identified by this study. In PEACE, it was found that most virtual team members of the UK branch were prepared to change their perceptions of their virtual teams in order to enhance their in-group identification. When conflicts seemed to be persistent with their colleagues in the Singapore HQ, team members in the branch indicated that they did not blame the other party. Rather, they attempted to evaluate and view the incident from a more favourable perspective. They tended to deny the existence of the thought of 'us' and 'them'. Instead the employees in PEACE's UK branch accounted for the diverse nature of an international company by saying that it was only a 'difference in perspectives'. Additionally, even though these team members felt dissatisfied with their current status within their virtual teams, they still perceived themselves as being part of the process of getting to know their colleagues in the HQ. They indicated that they needed more time to improve communication as a lack of face-to-face meetings and social interaction hampered effective communication within the virtual teams. Thus, employees in the UK branch of PEACE were able to offset their unfavourable experiences and dissatisfaction with their virtual teams by focusing instead on the idea that

the source of their problems was time – a critical factor for team building and for understanding development within the virtual teams.

Likewise for Team 6 of BATIK, there were situations in which those who could not speak English well showed obvious disappointment at their inability to contribute fully to their virtual team. Further, to put forth the idea that their role was progressing according to a defined plan, team members started to suggest and draft new policies and tactics in order to improve workflow in the future. Once this framework was in place, then English was used only to fill in the details. By doing this, the unpleasant and unedifying experience within the virtual team became more tolerable.

Members of Team 7 of DELIGHT maintained a positive identity by coming up with new criteria for inter-group comparison. Instead of team members comparing their current project with other operational projects, they compared their project with other non-operational projects and with other management practices such as payroll, recruitment or keeping records. By doing this they were able to see their contribution of the GHR bulletin from a new perspective – as a useful tool for disseminating information and bringing team members together. From this new point of view, they concluded that their work was important to the success of the organisation.

These results are consistent with the work of Ashforth and Kreiner (1999) as well as Elsbach and Kramer (1996) who demonstrate that team members' self-image can be enhanced even in a low status team when team members change their perspectives on values or standards given to the relative dimensions for comparison, or select a different team for comparison.

#### **7.7.4 Self-enhancement Strategies and Members' Conflict Handling Behaviour**

This sub-section discusses the impact of self-enhancement strategies on virtual team members' conflict handling behaviour based on Table 10 displayed in sub-section 7.7.3. The discussion is presented in detail under the following sub-headings according to the strategies of status protection, individual mobility, social creativity and social competition respectively.

#### **7.7.4.1 Status Protection**

The results of the current study reveal that the ways in which virtual team members protect and enhance their positive identity are reflected in their inter-group and conflict handling behaviour. It was found that most virtual team members who were satisfied with their current membership in a co-located team were willing to handle conflict in a collaborative manner. This is true, for example, of most of the members in the HQ in PEACE. This is because, being representatives of a high status group (the HQ), most were aware of their role in setting a good example to people in the UK and other branches. To them, collaborative behaviour in handling conflict was perceived and demonstrated to be an ideal way of educating and directing subsidiary branches in the organisation's rules and ways of doing things.

However, when there was unresolved conflict between the team members in the Singapore HQ and those in the UK branch, the virtual team members of the HQ tended to display competitive and avoidance behaviour. As a result, when conflict was prolonged and the tension between both parties escalated, employees in the HQ imposed authority and overrode the UK branch in decision-making, showing that they were less concerned about the feelings and positions of their UK colleagues.

Taking this point further, the way in which the representatives of Singapore HQ identified with those in the UK branch jeopardised their higher social status. In other words, virtual team members of the HQ were afraid of losing their social status by identifying with employees in the UK branch. Therefore they adopted competition and avoidance behaviours when handling conflicts. The HQ team members would confront employees of the UK branch and then refer these incidents to the top management in the HQ in order to force their concerns and decisions through, overriding the branch. This evidence supports the claim of Haslam (2001) that in certain situations, threatening forms of social creativity such as discrimination are likely to be used by members of a high status group or team, in order to justify and rationalise their superiority and the out-group's inferiority. The evidence also confirms the arguments of Turner et al. (1984) and Ellemers (1993) who claim that the prospects of achieving membership in a high social status team (in the

Singapore HQ) can lead to decreased in-group identification in a low social status team (as in the virtual team which was comprised of UK branch employees).

Another interesting finding was that the time difference of seven or eight hours between the UK and Singapore, combined with the virtual team's strong reliance on e-mail communication, mitigated the negative social consequences of competitive behaviour in conflict handling. Employees in the HQ were able to control and hide their expressed emotions through carefully worded e-mails that were intended to avoid misunderstanding as was the case in Team 2. However, telephone communication and teleconferencing do not always provide the same benefits. Such findings support the propositions of Montoya-Weiss et al. (2001) and McGrath (1984), indicating that the communication environment influences the impact of conflict handling behaviour as well as the impact that it has on team performance.

#### **7.7.4.2 Individual Mobility**

It was found that different viewpoints and interests in Team 5 (FORTUNE) caused most of its team members to look after and protect their own national agenda, which was in turn reflected in the interests of their local branches. As a result, most virtual team members were reluctant to the point of refusing to compromise with the management initiatives during discussions on global specifications. This attitude was seen by management as being 'unwilling to give in'. Since management was represented by one or two team member(s) on the virtual team, an internal conflict arose within the virtual team which showed itself prominently especially during discussion and negotiation about the work processes and global specifications. These attitudes led to the adoption of competitive conflict handling behaviour, in which each party tried to achieve their own goal without taking into account their colleagues' perspectives. When employees tried to impose their individual solutions on their colleagues, it became difficult for team members to reach a mutually beneficial consensus (see Chapter 6 section 6.6.2).

Team 5 relied heavily on e-mail communication. Since members were scattered around the globe, team mates were working in many different time zones and thus they received information at different times. As a result, these distributed members, although involved in

conflict, tended not to experience tension or aggressive emotions to the extent that they would have done had the information been given to all of them at the same time, as would happen in a co-located meeting. However, when teleconferencing was used during negotiations and discussions on issues regarding the project, tensions often arose owing to members' reluctance to compromise their national interest for international ones. It is possible therefore, to conclude that the use of e-mail communication has a positive impact on conflict handling behaviour in relation to team performance, while other ICTs where the transmission includes verbal and visual cues is not. This confirms the findings of Montoya-Weiss et al. (2001) who suggest that competitive behaviour in conflict handling does not always bring a negative impact on relationships between the parties, particularly if one party does not experience the tension or aggressive emotions of the other party, as is the case when colleagues use text-only ICTs.

It can be seen, therefore, that the proposition of this study (listed in Section 4.6 in Chapter Four) that individual mobility may prevent members from being concerned about other's feelings and building relationships within a virtual team can be confirmed. Their philosophy is 'my objective is to leave, so why bother'. Although the resulting competitive behaviour in conflict handling may not necessarily have a negative impact on relationships among the virtual team members when employees try to protect their own interests and impose their viewpoints onto their colleagues, it does lead to delay in the work process. It may also ultimately result in suspension of the project, as was seen in Team 5. However, it needs to be borne in mind that other factors such as the lack of support from management and protection of their own branch's competitive advantage and benefits, may also be critical causes which contribute to the failure of the whole project.

#### **7.7.4.3 Social Creativity**

As already described in sub-section 7.7.3, different versions of social creativity were found to be embraced by members who felt dissatisfied with their membership within their virtual teams. This confirms the current study's assumption (presented in Section 4.6 in Chapter Four) that social creativity can take many forms in protecting an employee's social identity within their virtual teams. These include choosing a new dimension for inter-group

comparison, and focusing on team members' contributions to the team in order to off-set unpleasant features, make them acceptable.

The different versions of social creativity found in this study (see sub-section 7.7.3) are consistent with Hallier and Forbes's (2005) findings among doctors where it was found that social creativity tactics are not only used to protect the social status of a group or team, but also to act as a personal approach to secure prepared identities from the threat of disapproving experiences. Furthermore, these results confirm the findings of Ashforth and Kreiner (1999) that when members encounter stigmatisation in their occupation, they redirect their work so that appears in a more positive light. They proposed that techniques such as 'reframing, recalibrating, and refocusing', enable members to frame a stigmatised or low status occupation in a more positive terms, modify standards at work, and focus on the significant aspects of their job. Also, a 'selective or downward social comparison', as happens when members compare themselves with other stigmatised groups, can enhance members' self-esteem and prevent damage to an otherwise vulnerable ego (Ashforth and Kreiner, 1999, pp.421-425).

Furthermore, this study proposed that social creativity would lead to conflicts being handled with collaborative effort and compromise (see Section 4.6 in Chapter Four). This was indeed found to be the case. In PEACE, for example, most virtual team members in the UK branch were found to be keen to solve conflicts collaboratively. They wanted to manage the conflict in a way that both 'maintained interpersonal relationships and met both parties' goals' (Shin, 2005, p.340). In order to achieve this, team members worked at compromise in order to find an appropriate and mutually acceptable resolution that met both parties needs. These findings may be explained in several ways. Firstly, most virtual team members of the UK branch expected to enhance their self-esteem in their virtual teams when they identified with a representative of the Singapore HQ. Secondly, the adoption of social creativity to achieve positive identity in the virtual teams increased employees' tolerance of mistakes. Team members would discuss, listen to the other parties and seek common understanding, in the hope of improving collaboration and cooperation and performance in the virtual teams.

Consistent with this, the team members of Team 6 were also found to have displayed both collaborative and compromising behaviour in dealing with conflict. Indeed, this resulted in new policies and rules which were established by team members, enabling them to improve their negotiation skills, workflow and work relationships in order to prevent conflict within their virtual teams (see Chapter 6, section 6.6.3). Likewise, in Team 7, some employees were even willing to go the extra mile on behalf of others by taking the initiative to solve the current problem on their own without troubling others. Such employees would also make face-to-face confrontation their last resort when dealing with conflict (see Chapter 6, section 6.6.4).

Overall, it was found that handling conflict with collaborative behaviour enhanced virtual team performance. Virtual team members were found to be willing to integrate the views of other team members such as representatives of the UK branch in PEACE as well as actively participating in the group decision-making processes as was seen in Teams 6 and Team 7. This finding is consistent with the findings of Paul et al. (2005) and Montoya-Weiss et al. (2001) which state that a collaborative outlook towards conflict handling has a favourable effect on group performance.

Dealing with conflict collaboratively requires ‘openness to others’ points of view and objective consideration of all information. Efforts must also be made to solve problems together and reach ‘jointly optimal solutions’ (Montoya-Weiss et al., 2001, p.5). Such methods may be difficult to implement through virtual communication methods such as e-mail, the internet, and teleconferencing (Hinds and Bailey, 2003; Kraut et al., 2002). However, evidence from the current study shows that the virtual team members are able to decode the latent emotions in e-mails, whether or not such emotions are explicitly written. This can often be supplemented by engaging in more discussion and clarification using the telephone, in order to clarify any points which may have proved difficult to understand through written media (e.g. Teams 6 and 7).

#### **7.7.4.4 Social Competition**

The assumption of the current study (see Section 4.9 in Chapter Four), drawn from Tajfel and Turner’s (1979) SIT, is that when employees believe that the low social status of their

team is unjust, then they may be open to prospects of improving their current social status through collective strategies, and in particular, social competition. In such situations, employees tend to be more competitive towards the other group or team (Tajfel and Turner, 1979).

Indeed, several competitive behaviours in conflict handling are observable in the data of this study. In PEACE, for example, members in the UK branch tended to perceive their social position as being seen to be inferior by HQ and that this was unjust from their point of view. These virtual team members felt that their self-image was damaged and that management doubted their abilities at work, particularly when every final decision of transactions which they made was repeatedly over-ruled by the Singapore HQ. As a result, there was a strong feeling of dislike among UK team members towards the HQ. There was also a strong inter-group discrimination within the virtual teams. Such feelings and bias prevented the team members in the UK branch from identifying within their virtual teams because of their virtual colleagues in the HQ. This confirms the proposition of SIT that when team members feel that their personal attachment with a low status team is unjust, they may also believe that their own social rank is unjust (Tajfel, 1978). Members in such teams end up feeling negative about their social status. This negative feeling can cause members to disassociate from identifying with their team (Ellemers, 1993, p.46).

In this study, it was found that when virtual team members of the UK branch of PEACE perceived that their personal status was lower than seemed justified, they often sought information or evidence from other colleagues in order to confirm the viability of the existing stereotype views they had towards their colleagues in the Singapore HQ. This confirmation gave them assurance that the HQ stance was unreasonable, which is what happened in Team 1. This finding supports the claim of SIT that when in-group distinctiveness is found to be undermined by unjust treatment, then the members isolate themselves in order to protect themselves from too much similarity with the out-group members, by constantly disapproving of and rejecting the out-group (Haslam, 2001; Tajfel and Turner, 1979).

Seeking confirmation from other colleagues has a negative impact on the relationship building amongst virtual team members because it encourages an unhealthy level of



gossiping among them. This was the case among the UK team members of PEACE. Indeed, the act of drawing a clear distinction between their team members in the branch office and those based in the HQ demonstrates the existence of a strong division or separation being drawn between groups (the 'us' and 'them' mentality). As a result, members tended to identify more strongly with their co-located teams in the branch office than with their virtual teams. An unfair estimate of their group status not only prevented people from identifying with their in-group members, but also resulted in the belief that a 'common fate strengthens in-group identification tendencies' (Ellemers, 1993, p.47). As concluded by Ashforth and Kreiner (1999), the perception of a 'shared threat' frustrated by the desire for confirmation, and the 'us vs. them' mindset which heighten team members' sense of difference and their alienation from others, both aid in fostering cohesion among the team members (Ashforth and Kreiner, 1999, pp.428-429).

The current study identified behavioural patterns associated with the social competition strategies that are consistent with those behaviours found in Hallier and Forbes's (2005, p.65) study where, 'open hostility, non-compliance, open defiance and distancing' are used by members to demonstrate their dissatisfaction. In doing so, the employees demonstrate their loyalty and allegiance to subsidiaries. As described in Section 6.6.1 in Chapter Six, there is evidence that some virtual team members in the UK branch preferred to distance themselves from their colleagues in the HQ by openly refusing to interact with them (e.g. Team 3) and intentionally delaying their replies to e-mails (e.g. Team 2). These acts show that team members clearly convey their dissatisfaction and by doing so they show similarity with those in the UK branch. Again, these results confirm the findings of Ashforth and Kreiner (1999, p.429) that team members who perceive prejudice result in their having a collective sense of 'relative deprivation, injustice, and resentment' among the team members. As these authors have argued, when the threat to positive identity increases, there is a likelihood that a strong workgroup culture will emerge to overcome that threat also increases.

One interesting finding was that although some UK branch employees would show hostile behaviour by openly challenging their colleagues in the HQ or by making the conflict known to other employees as well as to senior management, they tended not to force through their own solutions when dealing with conflict. One possible explanation for this is

that virtual team members of the UK branch were aware of their limited decision-making power and it was obvious to these employees that all the final decisions were being made by the HQ. As a result, they found that it was useless to resist the HQ's decisions and instead they sought assistance from more senior colleagues in the hope that they would have some input into the HQ's final decisions. Conflict handling behaviour can be influenced by factors such as the organisational hierarchy and the way in which decision-making power is distributed.

Furthermore, when virtual team members of the UK branch of PEACE believed that they were being unfairly treated, most of them still chose to accommodate their colleagues in the HQ, by seeking consensus and agreement with them in order to avoid conflict. This finding refutes the assumption of the current study that when employees adopt a social competitive strategy to enhance positive identity, they tend to display competitive behaviour in handling conflict. However, this is not always the case – it was found that most team members of the UK branch displayed accommodation and avoidance behaviour when dealing with conflict.

Such accommodating behaviour may maintain harmonious relationships between the employees of the UK branch and the Singapore HQ. To a certain extent, this accommodating behaviour is beneficial to virtual teamwork for two reasons. Firstly, employees in the UK branch tended to conform to the majority position and support the viewpoint of HQ rather than asserting an opposing, minority position. As a result, decisions were able to be arrived at more rapidly, which increased their overall efficiency and productivity. Secondly, such accommodation is beneficial to the social aspect of virtual teamwork. When virtual team members of the UK branch accepted the HQ's decision, then inter-group conflict within the virtual team was reduced, thus strengthening the relationships among its team members.

However, it was found that virtual team members of the UK branch were expected by those in the Singapore HQ to accommodate and to conform to all the decisions made in the HQ. Virtual team members in the HQ wished that subsidiary branches should uphold their ultimate interests and follow their rules and regulations in all instances (see section 6.6.1 in Chapter Six). As such, the agreement with the HQ expressed by the employees in the UK

branch may not be real but masked, as the absence of negotiating integrity between the two parties makes it difficult for branch employees to express their real feelings.

Again, this confirms the findings of Montoya-Weiss et al. (2001) that the members who adopt the accommodative approach to conflict tend to be more concerned with the needs and views of the other party (in this study the HQ) rather than their own and therefore accommodate their colleagues. However, Montoya-Weiss et al. (2001) argue that this style of handling conflict may not be constructive to virtual teamwork as there is a tendency to be more concerned with others' needs and views than one's own. Although accommodating others in the team may speed up the decision-making process, being overly concerned with others' needs and views may have a negative impact on the quality of decisions made as information and viewpoints are not fully considered or discussed.

Taking this evidence forward, the dissatisfaction of members in the UK branch continued when these members encountered a similar conflict which reoccurred within the virtual teams. Again, virtual team members then avoided confronting their colleagues in the HQ. Instead they referred the issue to senior management (see Section 6.6.1 in Chapter Six). This finding suggests that when in-group identification is relatively strong (owing to a robust identity threat), 'group competition for social status prevails over concerns for personal outcomes or material in-group gain' (Ellemers et al., 2003, p.52). Furthermore, protecting one's self-image will surpass any intention to compensate for the employment relationship (Hallier and Forbes, 2005, p.65).

## **7.8 Conclusions**

As virtual teams become established in the business world, an increasing sense of acceptance of such teams in the teamwork develops. However, such teams can be influenced by the virtual teams' set-up structures (temporary or permanent), diversity in its workforce composition, physical dispersion, and reliance on ICTs for communication. In a co-located team, employees tend to identify more easily with their team or with their organisation as a whole. Yet, the dispersed nature of virtual teams means that such identification may be limited to the restricted opportunities available. In order to ensure

positive identification in virtual teamwork, there is a need to change the traditional ways in promoting identification

This chapter explored the determinants that drive members to identify themselves within virtual teams such as recognition and acceptance. These determinants include the individuals' needs, the impact of the virtual environment on the identification processes, and the supporting role of the management in fostering identity. It was found that the intrinsic needs of virtual team members stem from an internal desire which can be satisfied by being met, in this case, by the recognition of other team members and subsequent acceptance into their team. On receipt of such acceptance, self-esteem, security, and commitment, employees will be able to increase their contribution to the virtual team. Looking further into the nature of intrinsic needs, other than the drive for self-esteem, important motivators in virtual team members' identification include the need for affiliation, for goal or achievement and for uncertainty reduction. It can be seen that these needs are met in the identification processes.

To reduce uncertainty in virtual teams, factors such as working cultures, years of experience, objectives, and length of membership were all found to be grounds that virtual team members used to seek similarity. They did not generally seek similarity based on demographic characteristics or kinship. This implies that only the variables which are likely to be linked to achieving a team's goal have an influence on team members' identification within the virtual team. Furthermore, virtual team members' knowledge of their colleagues' abilities, capabilities and reliability in the completion of tasks is vital for establishing the projection of perceived attributes and similarities among them.

This finding is later supported by the fact that diversity in values (i.e. opposing interests and opinions) prevent team members from identification, whereas the creating of agreed goals within the virtual team and a clarification of members' roles strengthens employee attachment to their virtual team. Information provided by management about the task, the virtual team and the team members appeared to be vital in promoting members' identification. Proximity was found to have an effect on the identification processes but the result was not consistent. For instance, in Team 7, it was found that for some employees, close proximity and frequent face-to-face interaction may adversely influence team

members' initial expectations of their colleagues, and the tendency for conflict to occur was higher. Conversely, for team members who enjoy social interaction and welcome visible and social cues during communication (e.g. Teams 2, 3, 5), long distance communication reduced their sense of belonging to the virtual teams and they welcomed the occasional face-to-face meeting. Support from management in providing advanced communication systems such as those enabling video-conferencing and online chat, and arranging occasional face-to-face meetings would be ideal. With this type of management support, adverse aspects of virtual teamwork were reduced.

The study, therefore, revealed that determinants to identification vary according to virtual team as did the underlying social psychological processes of identification. The contextual and situational factors were found to have diverse impacts on the identification of team members in different virtual teams. As a result, support received from management needed to be both multifaceted and adaptable, as the means used to promote identification in one virtual team may be inappropriate in another.

Section 7.6 extends the discussion on the impact of identity on conflict. This study found that identity tension within a virtual team can occur when members' identities are threatened because of the low social status of their team. This low social status may be the result of inequality of power distribution, the nature of the project on hand, a lack of support received from the management, or a language barrier. In an attempt to explore the impact of identification on members' cognitive and behavioural responses when facing identity-based conflict, section 7.7 scrutinised the inter-group and conflict handling behaviour of the employees. It concluded that when employees' identities are threatened, then social mobility, social creativity and social competitive behaviours were deployed as ways to achieve and maintain positive social identity. However, the deployment of such behaviour depends on the permeability of inter-group boundaries of identity. These, in turn, can be influenced firstly by the life span and continuity of the teams, and secondly, by the number of teams that an employee is engaged in. The section concludes that the permeability of boundaries for identity and the legitimacy of group social status influence employees' membership in the virtual teams and consequently their inter-group and conflict handling behaviour. However, apart from identity, factors such as the ICTs chosen for communication and the hierarchical and political power in the organisations can affect

members' inter-group and conflict handling behaviour. Indeed, this section has demonstrated the validity of SIT's assumptions about the use of individual and collective strategies to enhance identity in different social situations within virtual teams.

Overall, SIT and SCT are helpful in directing our insights into the identification processes and their impact on conflicts in virtual teams. In particular, the current study brings to light the potential factors relating to identification within the virtual teams, the response of team members when facing identity-based conflicts and how such responses influenced their inter-group and conflict handling behaviour. The results of this study expand the established SIT views by highlighting firstly the influence of individual differences, and contextual and situational factors of the virtual settings in identity construction; secondly, the result of the virtual teams' influence on team members' self-enhancement strategies; and thirdly, the impact of such strategies on virtual team members' inter-group and conflict handling behaviour.

As proposed by SIT, this study reveals that individuals have a strong desire to view their self-definition in positive terms. When they encounter identity threats within their virtual teams, they then rely on finding ways to protect and enhance their identity. It was found that the impact of the strategies used to enhance identity can be both positive and negative. As demonstrated in this study, methods of social creativity used to overcome members' negative perceptions and experience also help them to think positively about their roles as members of a virtual team. It was found that this also reduced negative perceptions of members in the out-group. On the other hand, the behaviour displayed when team members adopt the strategies of social competition appeared to be detrimental to the effectiveness of the virtual team and the organisation as a whole.

The study highlights evidence which has implications for several assumptions held by SIT. In-group identification will not automatically lead to the development of in-group bias and competition unless individuals face a robust identity threat during conflicts and thus opt for social competition to achieve positive distinctiveness. Therefore, it is argued that careful consideration of the factors affecting team identification is necessary in order to understand the links between social identification and inter-group behaviour within the teams.

To sum up, an analysis of the identification process within virtual teams provides insights into the psychological and motivational bases for team member identification with their teams. The study of the outcome and consequences of such a process not only provides an understanding of virtual team members' social behaviour within the organisation (in this case, virtual team members' inter-group and conflict handling behaviour), but also sheds light on possible ways in which management can address these issues in order to motivate virtual team members to work and think as a team.

## CHAPTER EIGHT: CONCLUSIONS AND IMPLICATIONS FOR FUTURE RESEARCH

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### 8.1 Introduction

This chapter draws conclusions on the current study and addresses its contribution to knowledge. The chapter is organised as follows. First, a brief synopsis of the work which has been undertaken is given. Second, the formation of identity within the virtual teams is addressed with a focus on the organisational dynamics, concentrating on interactions between their members and the framework within which they operate. Third, an insight into conflict in virtual teams, as seen through the lens of social identification, is provided. Fourth, the theoretical and practical implications of the current study are discussed. Fifth, the chapter continues by discussing some of the limitations of the current study. Finally, there is a summary of recommendations that future research might wish to pursue in exploring further some of the issues raised by this thesis.

This study has explored conflict in virtual teams by investigating the identification process in a selection of virtual teams and then analysed the outcome. In doing so it compared the data collected against existing theories. The concept of social identity has been recognised and used in many organisations as an interpretive framework in order to understand individuals' collective behaviour (Ashforth and Mael, 1996). Social identity informs 'who we are, what we think, and what we do' (Postmes et al., 2005, p.7). Therefore, reflection on team members' identification process in virtual teams provides an insight not only into how these members define themselves in relation to other individuals or social group(s) within the virtual teams but also into their social or collective behaviour. When an employee identifies himself or herself as a member of a virtual team, he or she is likely to 'perceive characteristic group features as self-descriptive and this leads him or her to adopt distinctive group norms as guidelines for his or her behaviour' (Boros, 2008, p.11). Virtual team members may adopt and incorporate the norms of their team into their personality so as to react more as the other team members do.



Virtual teamwork has become increasingly important in the workplace because of its ability to connect people, gathering them together across space, time and organisational boundaries to work as a team. As a result, virtual teams have become much more common - fuelled by the increased use of information and communication technologies (ICTs) by global organisations. There are, however, specific constraints in using virtual teams because of the limitation of what one sees and hears in the ICT environment, which can tend to aggravate differences of culture and value between employees.

Largely because of these constraints in the virtual setting, a number of challenges have appeared which have affected the functioning of virtual teams, one of which concerns the socio-emotional process which relates to cohesion and identity building among its members (Kirkman, 2002). Perhaps a more important issue is that of conflict in teams, which can have the most detrimental consequence in the operation of a virtual team and which can prove particularly difficult to deal with (Mannix et al., 2002). To overcome these challenges, creating and strengthening a strong psychological tie amongst the members of virtual teams is important (Wiesenfeld et al., 2001).

Understanding and appreciating that identification is a social procedure that is intrinsic in the environment of teams, and which affects subsequent reactions, this study has gone a stage further in attempting to account for the personal, structural and situational circumstances which occur and influence identification in a virtual team. In particular it examined the motivational source of identification within an empirical setting. Furthermore, this study explored the impact of social identity on conflict in virtual teams. It investigated how social identification can have a detrimental impact on team members and result in conflicts as well as in negative conflict handling behaviour.

What emerged from the current study has resulted in insights into the psychological and motivational basis of the identification process within virtual teams. The findings suggested that virtual team members were found to rely primarily on perceptual dimensions to identify themselves within their teams. Throughout all teams, there was a tendency for team members to identify positively with one another even if they had never physically met. All of the team members had a strong inclination to define themselves in terms of their team-based membership, whether such self-definition was expressed consciously or sub-

consciously. The study revealed that as a result of such inclinations there was a change within the organisations which saw the choice of belonging to groups or teams becoming more complex and varied. In virtual teams, the geographical dispersion of their members and the possibility of such team members engaging with more than one team at a particular time resulted in psychological attachment occurring at more than one level within the teams. It was found that in certain circumstances this could lead to multiple, overlapping and de-centred team memberships, which might have an adverse impact on relationship building and general functioning within the teams. With this background, this study has examined those potential factors which may prevent team members from identifying positively with their virtual teams. Besides identifying such negative causes affecting social identification, this study explored their consequences. Identity was found to have a significant impact on conflict in virtual teams. In particular, identification processes were found to have an influence on members' inter-group and conflict handling behaviour within the virtual teams. These behaviours could be constructive or destructive to the virtual team's functioning and, consequently, to the organisation as a whole.

## **8.2 Insights into the Identification Process within Virtual Teams: The Psychological Underpinning and Motivational Factors**

This research aimed to contribute to the theory of social identity by addressing the aspect of conflict within virtual teams. In this empirical study on how and why an employee identified himself or herself within a virtual team or teams, an insight into the antecedents of social identification within the virtual settings was presented. The analysis of the study focused on the dynamics and interactions which took place in an organisational environment by analysing how individuals were drawn into social identification processes.

The current study has revealed that that formation of identity is influenced not only by the members of teams (who are viewed as individual agencies), but also by the social structures themselves (see Chapter Five). For instance, when virtual team members categorise themselves within their virtual teams, they tend to focus on aspects of the team that make it distinct and in particular, the positive aspects of the team's operation. This has an influence on how the individual chooses to project their image and thus their methods of identification. It was found that members often prefer to identify with those colleagues who

are perceived to have a similar mindset and hold similar values. In this situation, individual team members can be viewed as agents who are able to contribute effectively to social identification procedures. They tend to monitor their thinking in order to decide who can be categorised as belonging to their 'in-group' of team members.

Team members' thought processes are often influenced by the social structures in which they find themselves involved. Differences in working cultures and values may well influence the perception of team members and/or encourage the formation of stereotypes both of how they see themselves in their minds and how they relate to their colleagues. Consequently this can prevent them from identifying with their virtual team because they are reaching out to a stereotyped image of them and colleagues rather than to the actual situation. Negative influences on the identification process can also be exacerbated by the virtual context in which organisational structures such as geographical distance, limitations in using ICTs to communicate, and the lack of face-to-face contact are particularly powerful.

Furthermore, most team members tend to define themselves more readily with virtual teams which they perceive to have a distinctly positive image. This was particularly true of Team 7. It was found that team distinctiveness can often be shown through the way others, such as other team members or management, perceive and value their members as individuals, as well as how they value the operation of the team as a whole. Therefore, although the formation of social identity involves the persons' subjective views, this formation is often influenced by the perceptions, or perhaps expectations, that other people have of them. It is argued that the emergence of an employee's social identity occurs at the interface of 'agency and structure' (Archer, 1995, 2000, 2002). Archer (2002) claims that there exists a combination of agency, social power and structural power, which work together to govern the formation of an individual's social identity.

This study then looked at the potential factors that arise which may promote or prevent identification within the virtual teams. By identifying these factors, one should be able to identify the underlying mechanisms that influence such identification. The evidence of this study revealed that all of the virtual team members defined themselves in terms of their team-based membership. In virtual teams, the team members often find themselves relying

on psychological dimensions in order to identify themselves within their teams. As claimed by SIT and SCT, and supported by Ashforth and Mael (1989) and Pratt (1998), it was found that identity can be developed with mere cognitive categorisation which does not, as in virtual teams, necessarily demand direct interaction between the employees.

What has emerged from the study is that evidence of members' identification within the virtual teams is driven by motivations to satisfy their own basic and intrinsic needs. Identification occurs when these needs can be satisfied by an employee's involvement with their virtual team. These needs include the need for self-esteem, affiliation, goal or achievement and uncertainty reduction. It was found that the lack of face-to-face meetings and the absence of physical and visible cues in communication led to an increasing sense of uncertainty, and thus an increase of uncertainty reduction. As a result, these team members often sought similarity among their colleagues.

It was found that similarity in terms of goals and objectives, working culture, and years of experience, all promoted identification within the virtual teams studied. Furthermore, contextual and situational factors such as diversity in values and working culture, as well as language barriers, were found to have an impact on employees' identification within their virtual teams. However, diversity in demographic traits did not have the same impact. The physical dispersion of team members appeared to have an adverse impact on those employees who emphasised a need for social interaction at work. However, virtual team members who worked closely with their co-located colleagues tended to be drawn towards a stronger sub-group identification with their co-located colleagues. This prevented the virtual team members from identifying more readily with their virtual colleagues. The findings suggest that management's role in promoting identification within the virtual teams is vital. As part of the self-categorisation process, information about their colleagues and happenings at other sites provided by the management was necessary if team members were to appreciate and feel connected to their colleagues. In addition, defining and understanding a common goal and communicating it to the team members was found to build up their sense of unity within the virtual teams. This sense of unity can be further enhanced when virtual teams receive social support from the management and peers.

Knitting together the factors which influence members' identification within virtual teams, the study provides an insight into the identification process based on the unique settings of the virtual team. The current study reveals, as Ashforth et al. (2008) note, that individuals are likely to identify with a stable entity that allows them to maintain a consistently positive view of self. While in co-located teams, the search to identify with a stable entity in the form of the work team is believed to be the result of employees seeing confirmation of their positive view of themselves; in virtual teams, members constantly seek confirmation to verify their self-view (Ashforth et al., 2008, p.335). But, virtual teams reflect a different challenge! In these teams, members constantly seek similarity amongst their colleagues in order to reduce the uncertainty faced within the virtual settings. Because of such uncertainty, the need for stability can be greater than in co-located teams. This is because they lack opportunities for traditional face-to-face interaction with their virtual colleagues. Through the creation of a common goal within the team, members tend to focus on their purpose within the team. This helps to boost perceived similarity among the members and tone down differences among them. Information about the team members and other sites helps to create a stable pool of background information with which members can identify. As the virtual environment by definition tends to give virtual team members the impression that the virtual setting is somewhat 'unreal', there is a need to compensate for this through the use of high quality communication and social support, endorsed by the management, in order to project a more visible membership in the teams. Such support was found to cultivate a feeling of belonging and to create a pleasant environment that encouraged team members to actively participate in the social process of establishing and sharing identity.

### **8.3 Insights into the Consequence of Social Identification and Its Impact on Team Members' Inter-group and Conflict Handling Behaviour**

This research reveals that identity has a significant impact on team members' behaviour within the virtual teams. It provides an understanding into the causes of identity-based conflict and its consequences on members' social behaviour within virtual teams, in particular their inter-group and conflict handling behaviour.

As virtual team members depend primarily on psychological factors when they build up a prototype to represent themselves, conflicting perception and expectation between those of themselves and of the team can lead to misunderstandings over the intrinsic value of a particular team. This can be because of different ideologies, approaches to work or work experience – any of which can cause conflict. During the identification process, identity-based conflict can occur when the team members encounter identity threats within their virtual team. It was found that these threats often come from feelings of inferiority to other members or teams. These feelings may arise from inequality in power distribution, the nature of the project, a language barrier or a lack of organisational support.

The empirical evidence has demonstrated a series of potential cognitive and behavioural responses which the virtual team members may demonstrate in response to an unacceptable social identity. When team members face an identity threat within their virtual teams, they tend to find ways to either protect their current identity or to develop a more positive identity. However, the strategies they use depend on the permeability of inter-group boundaries for identity - that is, the feasibility of transferring their membership to another group or team. There are two main factors that influence the possibility of transferring team membership. The first factor depends on the number of teams that a team member is engaged in at one particular time, and the second depends on the type of team within which this team member is working.

The findings of this study indicated that when team members feel satisfied with the membership of their team, they tend to protect the positive identity they have developed within their team by developing strong in-group identification. Such identification sometimes leads to discrimination against other teams (out-group) who are then referred to as 'them'. This study found that behaviour patterns such as distancing and the refusal to have social interactions with team members outside of one's own team are often displayed and used as a mechanism to demonstrate employee resistance to identification with the out-group. When conflict occurred in such an atmosphere, it was found that team members tended to display comparative and avoidance behaviour.

On the other hand, when team members felt dissatisfied with the membership in their team, they tended to find ways to gain a more positive identity by shifting to another team if the

opportunity presented itself. Such employees often showed less concern about their current team and had greater interest in other teams. Behaviour such as not wanting to have any social interaction with their colleagues, being unwilling to compromise and attempting to force their ideas on colleagues were negative behaviour that this study identified as being associated with the chosen self-enhancement strategy. If, however, the opportunity to gain positive identity in another team was unavailable, then members might concentrate on improving their negative and unsatisfactory experience within the current team in order to improve their status and improve their sense of identity. In this situation, evidence from this study shows that team members tended to change their initial negative perception and begin to think more positively. They often deny the existence of conflict, and instead expressed a belief that their role was progressing according to plan. They also took a new approach to inter-group comparison. When conflict happened, team members then were more likely to compromise and act collaboratively in order to solve the conflict.

Nevertheless, when team members' efforts failed to satisfy the requirements of their identity, and the identity threat encountered was perceived to be unjust, it was found that destructive behaviour was demonstrated by these team members. Such destructive behaviour included avoidance of inter-group interaction, information processing bias such as seeking confirmation to negative stereotypes, heightened emotional responses such as over-reacting to even slight provocations received by e-mail and open-hostility (e.g. to make conflict known to their colleagues who were not involved in the conflict and/or avoid dealing with the conflict but referring it to senior management). The reactions of virtual team members found in the current study were consistent with the assumption of Social identity Theory (SIT) that when team members' self-esteem is negatively affected, members will use three strategies of self-enhancement to improve their social identity (Hogg and Abram, 1988; Tajfel and Turner, 1979).

#### **8.4 Theoretical Contributions**

This empirical study sheds some new light on the relationship between social identity and conflict in the virtual team setting. It has theoretical implications for SIT. This work has shown that adopting a social identity approach for analysing conflict in virtual teams is appropriate as it helps the researcher to gain a greater understanding of team members'

identification processes and how such processes contribute towards conflict. In particular, it reveals how the social identification processes impact on an employee's reaction to conflict and the conflict handling behaviour they adopt.

Indeed, both SIT and SCT already provide a conceptual framework for understanding the cognitive dimension of social identification. These theories also recognise the motivational background of such identification. Nevertheless, SIT and SCT appear to have failed to take into account the broader contextual situations within which identity is formed (Ashforth and Humphrey, 1995), in this case, the virtual environment. Therefore the current study has attempted to account for the personal, structural and situational circumstances which influence identification processes in a virtual team, and in particular the motivators for such identification processes.

The study makes a number of contributions to social identification and research into inter-group relations in virtual teams. First, the range of individuals' intrinsic needs that motivate members to identification are observed, especially the ones that are based on uncertainty reduction, affective dimension (e.g. affiliation-related needs) and materialistic advantage. These serve as additional reasons for social identification that limit the validity of SIT and may well contribute to the desire to adjust existing theory in the light of practical experience. Through identifying these motives, the current research has also highlighted the importance of affective dimension when it comes to identification. Although social identity is defined by SIT as 'that part of an individual's self-concept which derives from his knowledge of his membership of a social group together with the value and emotional significance attached to that membership' (Tajfel, 1972: 292), this emotional dimension has been subsequently largely ignored, as indicated by (Johnson and Morgeson, 2005).

The results of this work endorsed the view whereby team members were motivated to identify themselves with their virtual team merely because of the need to 'want to belong'. This indicates that the emotional or affective significance is as important as the cognitive dimension in the construction of social identity. It also indicates that when such need can be fulfilled in virtual teams, the identification process is made possible and does not necessarily lead to inter-group discrimination or in-group bias (as suggested by SIT).



A second contribution concerns the association of determinants (i.e. those motivating factors, which influence identification) with individual and team differences. By examining the factors that motivate members to identify themselves with their virtual teams, this study applied SIT and found that it has inherent shortcomings, in that it appeared to neglect the intrinsic differences between virtual and co-located teams when it assumed that social identification carries the same meaning for every team member or every team (Brown et al., 2001). It would appear that this is not so. Not only do team members have variable personal motives, characteristics related to the team's function (e.g. sales or technical Team), its life span (temporary or permanent), the degree of virtuality (e.g. the frequency of face-to-face and physical interactions) and the degree to which its members rely on ICTs. All of these characteristics, whether individual or team-based, were found to affect virtual team members' social identification.

Further, the current research suggests that different virtual teams are imbued with different structural properties (Johnson et al., 2006; Lickel et al., 2000) which in turn, make them different when it comes to the way employees within a given virtual team are motivated. For instance, interpersonal relations or the desire to belong appeared to be more important reasons for group membership in the sales and customer service teams (Teams 2 and 3). This was in contrast to the technical teams (Teams 4 and 5) in which the desire to belong was not as strong a motivational factor. This study thus contributes to an issue which is key to the further development of social identity theory. i.e. the need to embrace the individual and team differences when analysing the motivating factors that drive identification. As the fulfilment of individual needs drives identification and those needs are often met through the work teams to which they belong, it follows that the relationship between the natures of a team as compared with the fulfilment of individual needs could be further investigated.

The third contribution looks at the empirical evidence obtained in relation to the effect of identification on team members' behaviour in handling conflict. The current study supplemented the application of the SIT in understanding conflict in virtual teams, particularly the understanding of team members' cognitive reaction and subsequently ongoing action when facing and dealing with conflict within their virtual teams. The results have highlighted the idea that enhancing identity in the work place may not be as simple or straightforward as Tajfel and his colleagues would suggest. For instance, it may be possible

for team members to transfer their membership from one group or team to another in order to improve their social identity (Tajfel and Turner, 1979). In a situation in which there is dissatisfaction and conflict, transfer between teams may be seen as the only option. However, for such an option to be realised, there must be an appropriate team to transfer to as well as management approval for that transfer.

Nevertheless, opportunity should be taken to analyse the precise source of the dissatisfaction because asking for transfer is an extreme action. Ways of reducing or minimising negative identity may be available and capable of being exploited. For instance, limiting the tenure of time on a team to for example two months could count against productive longer term interests and contributions, but this could be remedied by asking for an extension to the term of office. Conversely, if a member or members of a team were acting in a particularly difficult way, the remedy here could have a confidential word with management in order to explain the problem and its effect on personal contributions. The cause of dissatisfaction could be that the member is not 'stretched' enough e.g. they might be in a financial or manpower advisory capacity when applying their degree in engineering would result in their experiencing much more job satisfaction.

The current study had confirmed that one cannot rely on a single strategy when looking at the application of self-enhancement strategies. Different strategies can be used at the same time, or following each other, depending upon the situations which manifest themselves. This has contradicted SIT's conventions when applied to self-enhancement strategies since a situation cannot be seen as "one-time or one off". In the current study, virtual team members' self-enhancement strategies and conflict handling behaviour were found to change and vary as they dealt with particular social situations. The findings revealed that team members could engage in a range of socially creative behaviour at the stage when a degree of conflict was first realised but change to adopting social competitive behaviour at a later stage (as was seen in Team 1). Therefore, this study suggests, as Hallier and Forbes (2005) have argued, that the adoption of self-enhancement strategies may not be as incident-specific as previously suggested by SIT. The pursuit of self-enhancement strategies was found to evolve over time. Identification is often an on-going process (see Chapter Three), thus time may play an important role in the way identification processes

influence employees' self-enhancement strategies as well as their inter-group and conflict handling behaviour.

Finally, this study attempted to broaden the scope of SIT by carrying out real-life observations to assess inter-group relations that exist in virtual teams currently operating in organisations. It did so with the knowledge that the characteristics of such teams are becoming more prevalent and that they differ from those of traditional organisations. Observing actual organisational settings allowed the researcher to identify how particular social variables can have specific impact on the larger social situation. This contrasts with most of the existing research which was mainly conducted in laboratory settings (Ellemers, et al., 1988, 1993) or among a sample of students (Boen and Vanbeselaere, 2001). This research has been criticised for its inability to be applied to real work settings (Chrobot-Mason et al., 2007). On the contrary, as this study was based on data collected from outside the laboratory, it is a better way of exploring the validity and usefulness of SIT.

The current study also suggests a number of useful methodologies in doing identity and conflict research in the virtual setting. First, direct non-participant observation at different sites is beneficial in order to study the workflow, working patterns and social interaction of virtual team members. There is a tendency for such members to suppress any negative emotions which they may have at the time of conflict when using e-mails, telephone and (to a lesser extent) video. Then, an alternative and possibly a more positive way to identify those underlying tensions and emotional expression that give rise to conflict is through direct observation. Consequently, observation is seen as a useful way to quantify the duration, extent, and variety of any emotional occurrences. Nevertheless, direct observation may seem as not being feasible in doing research in virtual teams owing to the constraints involved in financial cost of travelling and time. In such situations, the collection of e-mails is seen as an alternative option for collecting data. As most virtual team members rely heavily on e-mails in their daily communication, an analysis of their e-mails tends to be useful method to justify conflict issues which had been stated by the interviewees during their interviews. It was found that these e-mails not only provide documentary evidence, but that they also allow the researcher to capture potential causes of conflict resulted from misinterpretation, miscommunication and techniques used by employees when writing e-mails. Nevertheless, e-mails can also have a moderating process in resolving such conflict,

when a writer can specifically try to use soothing and encouraging words. Also, the team members' emotions and tensions expressed in written form during conflict can be teased out.

## **8.5 Practical Implications**

This research has a variety of implications for human resource management as far as promoting team identification and mitigating conflict in virtual teams is concerned. New potential for the design and development of more effective virtual teams and training are now addressed. While it appears that identity-based conflict occurs because of team members' need to develop a more positive identity in circumstances where they do not feel respected, organisations also need to understand how employees' ability to gain and enhance their self-conception can have a significant impact on the reduction of conflict and other undesirable behaviour. Organisations need to appreciate the nature of individual differences between virtual team members and the effects such differences have on interpersonal relationships. They would also do well to pay more attention to the negative impacts that the virtual environment can have on the formation of identity within teams.

As discussed earlier, members working in virtual teams rely on their perceptions when identifying themselves within their virtual teams. As a result, team members are still able to establish strong bonds with one another even when face-to-face contact between them is minimal or absent. When management understands this, they will be better placed to offer constructive support to these employees who are engaged in virtual teamwork. The benefits of such understanding are seen in Teams 2 and 3 in which their organisations both had a 'one family' work ethos, and the management of both virtual teams made the effort to support this ethos. For example, in both virtual teams the management encouraged social interaction via the use of ICTs and by arranging frequent face-to-face meetings that had the desired effect of strengthening members' feelings of belonging and inclusiveness within their teams.

Furthermore, members of virtual teams needed to reduce the uncertainty they faced owing to the absence of visible communication cues. In order to reduce uncertainty, virtual team members constantly search for similarity between themselves and their colleagues. In

particular they tried to identify in colleagues similar traits and mindsets as their own. In doing so, they needed to constantly search for and validate information about their colleagues. It can be seen, therefore, that knowledge and information management is important for virtual teams. To foster identification, team leaders may want to make available information that accentuates the similarities among the team members, especially information about the team members' expertise and work experience. Management can also help a virtual team run more smoothly by openly sharing information with all team members about their colleagues' illnesses, study leaves, holidays as well as information about timetable change such as when the critical path of operations changes, if there are new constraints or delivery problems or if there are new treats planned like a staff outing or team-work bonus. Management may also assist the positive development of a virtual team by reporting on local requirements, customs and related processes as well as giving reports both on the progress a project is making overall plus the progress being made in individual branches or virtual teams. In addition, management can effectively encourage a strong sense of interdependency and oneness among the virtual team members by establishing a common team goal and clarifying the members' roles in achieving that goal.

To strengthen the attachment of virtual team members, and particularly the attachment of semi-virtual team members to their teams, the influence of the local atmosphere and any sub-groups needs to be taken into consideration. Creating a super-ordinate category for the team as a whole through the use of a shared goal leads to the creation of a new, inclusive team identity. As Gaertner and Dovidio (2000) and Postmes et al. (2005) argue, creating such a category encourages team identification by reducing the salient attributes of any sub-groups that may have existed as well as any inter-group comparisons. Thus, it reduces the potential for inter-group conflict arising from diversity in demographical background and culture.

### **8.5.1 The Need for Practical Training to Reduce Conflict**

Given the popularity of social groups and work teams in organisations, it appears vital that training is developed which looks at group-based behaviour as it affects the team, as opposed to having an aggregation of multiple individual behaviours (Korte, 2007). This research has suggested several issues that would assist virtual team leaders in preventing

identity-based conflict from emerging and escalating if they were included in their training programme.

In order for such a programme to be effective, potential causes of identity tensions within virtual teams need to be identified and made known to team members through training. Causes need to be made known in order for them to be addressed. Often causes stem from misunderstandings, personal likes or dislikes, a lack of information from management, weak or inactive members, ambiguity in aims and objectives, and poor timescales, to name but a few. A good training schedule should address these and give advice as to the best way to address each of these issues in order to minimise possible conflict.

For example, in PEACE, members in the branch often believed that they were being treated unjustly because all of their decisions were referred to the HQ. In situations like this it would be helpful for the management to be made aware of the existence of training programmes for those employees who are working in virtual teams. Such programmes could provide an explanation as to the power, role and operation of the HQ and the branch, in order to highlight the way in which their different roles could be complimentary rather than conflicting, so that all employees could better contribute to the company's goals and vision. Any differences in terms of resources, roles, responsibilities, and organisational culture between the HQ and the branch could be clearly highlighted so that members could better appreciate the perspectives of their virtual colleagues and the precise role they play in the organisation.

For training to be effective, organisations need to be aware of the effects of ICTs on conflict and members' conflict handling behaviour. For instance, employees in PEACE often complained about the delay in communication between branches that was caused by problems of information overload and the inefficiency of the internal information system. In training sessions, trainers would inform the participants of techniques that might improve such situations in which immediate feedback was delayed. Examples of such techniques include the holding of periodic conference calls, the outlining of specific procedures for responding to e-mail, the introduction of on-line postings, and the clarification of management's role.

In addition, training sessions should recognise the need to identify potential threats to virtual team performance that arise from identity-based conflict. In practice, management can take note of and observe any behavioural patterns associated with conflict in a virtual team and be aware of their impact on team effectiveness. Appropriate remedies and advice can be given to employees in order for them to take appropriate action at an early stage of conflict. It may be likely that sometimes, a strong culture and in-group bias has been developed in the sub-groups within the virtual teams and such culture and bias may be detrimental to the team as a whole (see Ashforth and Kreiner, 1999). In this study, for example, most team members of Teams 1, 2, and 3 of the UK branch in PEACE displayed open defiance by refusing to interact with their colleagues in the HQ. Training would help identify this possible threat at an early stage. Not only would it help all team members to develop a greater understanding of the emergent problem, but also it would help team leaders identify the root causes of problems so that they could intervene and act as conflict mediators when necessary. An open discussion could then be arranged for employees to deal with the conflict constructively. Training would help each team member in the discussion to react in a more reasonable and understanding manner. This action should not only be taken when conflicts occur, but also be used regularly from the beginning in order to foster a climate of open-minded discussion among team members.

Indeed, the amount and quality of training and advice provided for handling conflict had a significant influence on members' conflict handling behaviour as was seen in Team 2. Training can help empower members to manage their emotions better and to become more skilful in communicating with colleagues whether by e-mail, speaking face-to-face, on the telephone, by text message, or by written letters. Providing employees with training on how to communicate effectively with others can do a lot to minimise misunderstanding and possible ambiguity.

## **8.6 Limitations and Suggestions for Future Research**

It has become apparent that there are inevitable limitations to this research, mainly owing to time and financial constraints. Suffice it to say that the study has, it would be hoped, set the scene not only to illustrate the effect of actual situations but also how these can be

related to existing theory. Consequently it has become evident that these limitations could well be addressed in future research, and they are identified more specifically below.

The first concerns that have become apparent relate to the historic examination of issues of identity and conflict, which were taken from a social psychological perspective. According to Abrams and Hogg (2004), research and theory on social psychology have tended to examine each social process separately, as if they were isolated. However, as is seen in this work, life is not divided into isolated social processes, rather they are interrelated. Self-categorisation, social comparison, social identification and conflict occur at the same time and these processes are inevitably and inexorably intertwined. Nevertheless, this study has examined each of the identification processes separately in order to detect the specific impact of each process on conflict and on virtual team members' behaviour, so as to provide a deeper understanding of the specific causes, inter-relationships and consequences of each identification process as it applies to conflict in virtual teams.

Most virtual team members who participated in the current research were simultaneously working with both their virtual and co-located colleagues. This begged the question as to the extent to which their colleagues were included in their in-group and the degree to which these colleagues were perceived as unified and coherent in a group situation (Lewis and Sherman, 2003). As a result, measuring the degree of group identification may be useful when attempting to understand, consider and comment on in-group and out-group bias within virtual teams. This is because it is the degree of identification which influences team processes in order to form an impression of the team. Therefore, it is possible that its stereotypes could be associated with the cause of conflicts. More works need to be done to examine variations in identity strength and their impact on employees' inter-group and conflict handling behaviour in virtual teams. Future work also may concentrate on comparing virtual and traditional team members in order to evaluate how their identities differ owing to the differing natures of the teams to which they belong. Alternatively, researchers may wish to study semi-virtual teams and examine the salience of the team members' identification in different social and organisational structures, taking into consideration the impact of the degree of virtuality on team identification and the virtual team's general functioning.



In the current study, multicultural virtual teams offered additional complexities that the researcher was unable to address in the context of a single study. Since virtual teams are by nature geographically dispersed, there is a much greater tendency for members to come from a variety of different cultures than would be the case in traditional co-located teams. Indeed, all, or at least a large proportion of, an in-group may be comprised of employees from one culture and that of an out-group comprised of employees from a different culture. Addressing cultural diversity in any future research may shed valuable light on sources of misunderstanding and conflict. In the study, for instance, national culture was found to have an indirect impact on virtual team identification. In PEACE and FORTUNE, the distinction that employees made between individualist and collectivist colleagues resulted in negative stereotypes among the virtual team members. Future research might need to consider this basic dimension in more detail, perhaps focusing on its occurrence in one particular country. As seen earlier, examining the effect of cultural dimensions alone may not sufficiently predict conflict and members' conflict handling behaviour in intercultural settings. There are other situational factors that have the potential to influence conflicts and employees' behaviour, and these require further investigation. Such factors may include the urgency of the situation, the cultural identity, and social status of the employees involved (Brew and Cairns, 2004, p.349).

As well as the cultural differences, there may also be a need to examine other factors that contribute to conflict. For instance, problems associated with organisational systems and policies such as disciplinary policies, the way the organisation handles grievance, the readiness of management to provide vital information, or the presence of vague time scales and poor intra-team feedback, may contribute to the fuelling of social identity conflicts. Future research could concentrate on the extent to which such problems contribute to conflict. It could look at the relationship between management and the virtual teams for which they are responsible, to assess what sorts of understanding people hold about each other. The same could also be done within teams with the ultimate goal of alleviating conflict both within the organisation – between management and the virtual teams – and within virtual teams. This approach would most likely have a positive influence on employee behaviour and improve their efficiency and morale within virtual teams.

Other potential factors affecting conflict in virtual teams could also be considered in future research. Additional research may also wish to consider the psychological development of stress and related factors which can lead to conflict, and in particular attempt to identify a series of stages that members go through when facing identity-based conflicts, and then to investigate the influence of identity on each stage (Northrup, 1989). In doing so, the employees' psychological responses, their anxiety, feelings and tensions could be teased out. Evidence in this study suggests that when employees face an identity threat in virtual teams in which changing team membership is not possible, they often develop strategies for reducing their negative experiences and unsatisfied feelings in order to maintain a core sense of identity, as was seen with employees in Teams 1, 2, and 3. As the situation developed (members in the UK branch of PEACE perceived that their social status in the virtual team was unfairly estimated), the Singapore HQ of PEACE was then perceived as the out-group. This demonstrates that virtual team members' behaviour and reactions may change and evolve within a single conflict. Further work needs to consider this process, beginning with how a perception of threat occurs, how it escalates and how this results in the emergence of even greater problems.

According to Pratt and Foreman (2000), SIT assumes cognitive awareness of the identification process, but the process may exist in conjunction with 'a latent or not consciously held organisational identity' (as cited in Fiol, 2002, p.658). As a result, finding out the cognitive responses of employees may be problematic. During the data collection stage, the researcher encountered problems when asking the participants about their level of identification. Although observation and collection of e-mails were used as research tools in the current research, long-term ethnographic research may be required in the future if one wishes to capture the on-going dynamic of the identification process over an extended period of time (Wiesenfeld et al., 2001).

In the current study, observational measurement of conflict was limited. This was for a number of reasons including the limited amount of time available for research, the incomplete observation of the details of how the employees were provoked to, were engaged in, and resolved conflict, the lack of funding to extend the study, the management's limited willingness to open up their organisation to the researcher, and the fact that conflicts did not necessarily occur during the period of research. In addition,

conflict handling behaviour such as avoidance is by definition, difficult to observe or measure, since avoidance is synonymous with inaction (O'Connor et al., 1993). An employee may have had an unpleasant experience of conflict with the organisation or a colleague, but the expression of such an experience can be constrained by several organisational or personal factors that result in the employee's unwillingness to discuss it. To tease out the hidden data, it is necessary to conduct close readings of e-mails, letters, faxes and text messages used by the employee or employees involved.

## **8.7 Conclusions**

This research successfully expands SIT and contributes to the literature on virtual teams, by examining issues of conflict in virtual teams through developing an understanding of social identification within such teams. In particular, the study investigated the formation of social identity in the team setting and its impact on members' inter-group and conflict handling behaviour. This research can be seen as an attempt to shed some light on the dynamics of the dialectical relationship between the psychology of the collective self (social identity) and variables of social structure.

This research has made a purposeful attempt to reveal the interaction between the individual and their virtual teams, especially the cognition and emotion involved in employees' perception of both themselves and their colleagues. It has also attempted to reveal how employees enhance their feelings of inclusiveness in relation to their virtual teams. The exploration of team members' motivation and their bases for identification, the appreciation of group differences and the effects of the virtual environment, have been used to present a basic model which defines a team based on a variety of motivations associated with team identification. It was established that virtual team identification is self-driven and that personal differences effectively influence identification. As virtual team members may first aim to identify with their teams in order to fulfil their individual needs, the extent to which they succeed in this has an impact on the development of psychological ties between them and their virtual colleagues.

Furthermore, the recognition of a series of potential cognitive and behavioural responses which virtual team members may demonstrate in response to an unacceptable social

identity has extended existing insights concerning the impact of self-enhancement strategies on team members' cognitive and emotional processes as well as their behaviour. It is argued that a strong shared identity is conducive to increasing employees' morale and improving their integration into the virtual team. It also establishes performance norms such as the enhancement of group communication and co-ordination that are critical to virtual teams where social cues are lacking. The explanation given by SIT may provide a valuable contribution to a model of virtual team management so that organisations can better manage conflict and achieve optimum coordination.

Management interventions that are aimed at promoting strong psychological ties between virtual employees need to be focused on mitigating the negative effects of employee diversity and reducing the incidences of sub-group creation especially in semi-virtual teams. This can be done by giving the team a common goal. Managerial interventions aimed at providing information to virtual team members about the remote sites and their team mates, the clarification of group goals and team member's roles in goal achievement, the building of a shared interpretive context and perceptions of social presence through quality communication, and the improvement of employees' conflict management skills were also found to be important in encouraging members to think as a team and giving them a visible team membership in the virtual environment. As Brake (2006) pointed out, one of the ways to beat isolation and to build a strong sense of team identity is to appreciate the centrality of the individual. Organisations need to acknowledge the usefulness of members. They also need to recognise that their employees have the desire to be successful and to be recognised while working in an environment in which they feel a sense of belonging. It is also important for organisations to remember that their employees are human being with many emotions, such as feelings of alienation, sadness, anger, frustration, and the desire for revenge all come into play when conflicts emerge.

To sum up, employees in virtual teams need to feel valued for who they are, and not just for what they do or where they are. It is argued that social identity is one lens through which virtual employees view and make sense of their roles and responsibilities in the work place. As Korte (2007) notes, since social identity elicits the employees' interaction with the team, the effects of social identity become a crucial issue when considering interventions at the team level, particularly in the virtual setting. Overall, this thesis has identified the socio-

psychological component of identity-based and inter-group conflicts in virtual teams. It has revealed the importance of group-based social psychological intervention in comprehending and improving inter-group relations. In making these advances, it is hoped that this research might pave the way for further research on identity formation and identity-based conflicts in virtual teams.

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